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THE

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L'ENVOY.

It is a wise hospitality to hail the advent of a coming guest with a frank welcome, and speed the parting friend with a hearty God-send! Life cannot stand still. We are in a world of change and progress. Certain epochs recur periodically, and are obviously coincident with determinate cycles of existence. Spring and summer, autumn and winter, change the face of the earth; and in all seasons we may look abroad and observe constant progression, not only in the physical, but also in the moral and intellectual world. And so we journey onwards; until the close of the year brings us to another land-mark, and invites the thoughtful traveller to pause and reflect upon the vista through which he has passed, ere he proceed, under the auspices of a new year, along the path of his destiny. The last day of the old year is a definite point or boundary, as it were, between the Past and the Future. Here, for a moment, "Nature pauses on the bridge of Time;" and, amid the convivialities prepared to cheer the Christmas hearth, men instinctively ask themselves how the past year has sped with them—whether it has been, upon the whole, fortunate or unfortunate, happy or unhappy—how much there may be to rejoice at, and how much for which to mourn? Has the stream of life flowed cheerfully and brightly onwards, in the open sunshine of God's love; or has it been troubled and darkened by the adverse storm-clouds of affliction?

At such a season, it is right that men who discharge responsible duties in the commonwealth of literature, whether general or professional, should appear before the tribunal they are in the habit of addressing; were it only to thank their friends and contributors for their kind suffrages, and solicit a renewal, or rather a continuation, of their favours. We may therefore fairly ask, How do you *now* like the *Medical Times?* Better and better, say you? Good:—for no men love to labour in vain, or to have their claims for approbation churlishly refused. We *know* that we have deserved your good-will; and we are sure that you know it no less. We believe that, as a consequence of that good-will, we shall receive your continued support; and in that belief we derive strength and encouragement for future exertions. During the past year we have taken pains to improve every department of the Journal, and to make it worthy the high and influential position it has acquired in Medical Literature. In Science, the *Medical Times* has done much for the Profession; and may well challenge competition with any, or with all its contemporaries. The Lectures of Dr. Letheby will, when completed, form a text-book of medical jurisprudence as regards poisons and poisonings. Mr. Walton's Lectures on Operative Ophthalmic Surgery have been completed, and are as yet the only publication entirely devoted to that important specialty. We rejoice to announce they form the nucleus of an extended work on the same subject. Mr. Ancell's Lectures on Blood Diseases are second to none as a *résumé* of all that is known of Tuberculosis, and form a valuable work of reference; while the Clinical Lectures of some of the leading Physicians and Surgeons of the present era, have conveyed to every corner of the kingdom a knowledge of the principles and practice of the highest authorities. We may safely refer to the names of Burrows, Cooper, Fergusson, Lawrence, Parkes, Quain, and Stanley, who have given us their support; and to Barker, Lloyd, Roupell, Skey, Todd, Walshe, and many others who have promised us their assistance in the diffusion of sound practical knowledge, in this important department of our journal.

In Original Communications we have been remarkably rich. The papers of Dr. Jenner, of University College, on Continued Fever, have excited great attention in this country; while on the Continent their importance has been recognised by translation. Dr. John Taylor's philosophical communications on the Treatment of Pericarditis afford a striking illustration of the benefit the science of medicine may derive, in estimating the value of therapeutic agents, from a close adherence to the rules of induction. In Midwifery, Dr. Rigby and Dr. Waller have selected the *Medical Times* as the medium for communicating much valuable and practical knowledge; and the papers of Dr. Snow Beck, which we have commenced, will, we anticipate, throw much light upon the vexed question of Uterine Pathology.

But it is needless to particularize, and perhaps invidious to select. Suffice it to assert, that this department of the *Medical Times* exhibits, in the present volume, a mass of original matter, unsurpassed, nay, unequalled, by any medical periodical in the kingdom.

We have, moreover, introduced a novel feature in medical literature. Our *authorized* Hospital Reports are not crude and undigested productions, abounding in platitudes and second-hand observations gleaned from a dresser or a nurse. No! our reports are written by men in connexion with the hospitals they represent, and selected for the duty by the medical and surgical officers themselves.

Barclay, Holmes Coote, Senhouse Kirkes, Rooke, H. Smith, and N. Ward, are names which cannot fail to inspire confidence, not only in the accuracy of the facts detailed, but also in the judgment displayed in selecting and commenting upon them.

The greatest care has been taken to secure accurate accounts of the Proceedings of the various Medical Societies; and, when of general interest, full reports of the discussions have been given.

The *Medical Times* is confessedly unrivalled in the extent of the information it conveys of the progress of the Science of Medicine in other lands. Not only are the leading German, French, and American journals carefully analysed by gentlemen conversant with each department of medicine; but our correspondents keep us *au courant* with those *on dits* which, failing to find their way into the public prints, are only to be gathered by those upon the spot.

With reference to the Reviews of Books, we have to acknowledge the assistance we have received from some of the most able men in the Profession. While we trust that this department of the journal will be conducted with the same ability in the forthcoming as in the closing volume, we will also endeavour to insure early notices of books forwarded to us.

We have great pleasure in being able to promise our readers, during the ensuing six months, a large number of most valuable and interesting original papers. Among these will be communications from Dr. John Taylor, of Huddersfield, and Dr. Inglis, of Halifax; a series of papers on the Diagnosis of Diseases of the Ear, by Mr. Toynbee, F.R.S., so well known for his researches into this subject; a Course of Lectures by Professor Guy, of King's College, on Public Health; Lectures by Mr. Quekett, on Normal and Pathological Microscopical Anatomy, delivered before the Royal College of Surgeons; and the conclusion of the Lectures of Professor Owen, Dr. Letheby, and Mr. Ancell.

In the department of Practical Medicine,—in addition to Clinical Lectures delivered at St. Thomas's Hospital, by Dr. Barker; at St. Bartholomew's, by Dr. Burrows and Dr. Roupell; at University College Hospital, by Dr. Parkes; and at King's College Hospital, by Dr. Todd,—the readers of the *Medical Times* will have the benefit of the experience of Dr. Baly, the scientific and practical Physician to the Millbank Penitentiary, who has promised for the journal a series of Clinical Reports and Observations.

As one great object of our publication is to raise the moral tone of the Profession, we shall, with even increased jealousy, watch every effort made to use our columns as a vehicle for personal attacks. For our own part, we have striven to separate the scientific opinions from the private acts of individuals;—while we regard the latter as too sacred for notice, we hold the former to be a fair subject for criticism.

Our Political Principles have undergone no change. We are, as we have ever been, the unswerving advocates of a high professional qualification, with guarantees for a uniform standard throughout the country, as a preliminary to the grant of equal rights and privileges to all regularly educated practitioners. We desire to see the old corporations reformed upon just and equitable principles, so that they may suitably represent the aims, the interests, and the intelligence of their members, and become the honoured media for carrying on the scientific progress, and developing the talents and energies of the Profession. Reform is wanted, and we must have it. We have not cried peace, for we know that there can be no peace while first principles are transgressed, and inalienable rights withheld from the large majority of the Profession. The Colleges of Physicians and Surgeons must be rechartered, and their constitution placed upon a wider and more liberal basis. We desire, too, that the hard-working General Practitioner shall be protected in his daily practice; and that the encroachments of avowed empirics on the one hand, and practising druggists on the other, shall be arrested by legal enactments. The high culture and anxious labours of the Profession are already practically ignored by Poor-law Commissioners and Boards of Health; while the community at large, even in their private relations, are too apt to lower the pecuniary value of those professional ministrations which, at the time of suffering, are called for with eagerness and admitted to be indispensable and beyond all price. We would increase the standard of remuneration—place it on a better basis—and make it more secure. But why enumerate the articles of our political faith? They are written in our past pages. Our independence may have caused resentment in quarters where we might have expected gratitude; but we are assured that the Profession is too intelligent to be misled by petty pique, and too generous to harbour a doubt between a tried friend and counsellor and an unknown and inexperienced zealot. While our experience has increased, our power has become greater than it ever was; and we are resolved that it shall be exerted perseveringly to remedy the abuses that have for ages distracted and disgraced the Profession. We intend, on an early occasion, to refer to the duties which will be required at the hands of every member of the Profession during the next session of Parliament.

Those who are satisfied with the past, we promise shall have yet better reason to be content with the future. The eminent position of our journal makes the conservation of its character an anxious care; for the duties and solicitudes of management are in due proportion to the magnitude of the interests to be guarded. Were our journal less esteemed, we might be more indifferent; but, while the Profession continue to approve our efforts, and to extend to us their liberal confidence, we cannot but feel anxious that the journal shall be universally admitted to be worthy of the approbation and support it receives. We are prepared, therefore, to afford our readers the newest intelligence in all departments; to give the best summaries of science, the best reports, the best original contributions, the best articles that can be procured; and we merely expect in return, that the Profession will give us their best attention and their best word—an easy requital for a service so laborious.

ORIGINAL LECTURES.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

1. ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE I.

Prefatory Remarks.—Liebig's Doctrines and the Cell Theory.—Tuberculosis.—Division of the Subject.—Of the Tuberculous Predisposition.—Of the Blood in the Tuberculous Predisposition.—Its Qualities deduced from the Blood in Scrofula and Incipient Tuberculous Disease.—Physical Properties of the Blood in the Tuberculous Predisposition.—Its Microscopical Characters.—Its Chemical Qualities.—Analyses of the Blood in Scrofula and incipient Phthisis, by Nicolson, Garrod, Fricke, Andral, and Gavarret, and Becquerel and Rodier.—Summary and Diagram of the Condition of the Blood in the Tuberculous Predisposition.

Ten years have elapsed since I published a Course of Lectures on the Physiology and Pathology of the Blood, which was so far favourably received by the Profession, as to lead to an extensive correspondence, and frequent invitations to reproduce the materials, and to develope the facts and principles, with their legitimate inferences, in a form less likely to prove ephemeral. These lectures were translated into the German language, republished in America, and were quoted and favourably commented upon by some of the most eminent individuals in this country and on the Continent, of whom I may mention Professor Sharpey, in nis lectures at University College, London, and the late lamented Dr. Franz Simon, of Berlin, in his "Animal Chemistry with Reference to the Physiology and Pathology of Man."

At the period to which I refer, very little attention had been paid, in the British Schools of Medicine especially, to the fluids in the human organism. The exclusive doctrines of solidism had not yet merged into a more comprehensive pathology, and the very title of my lectures, in which the blood was made an object of physiology and pathology, was regarded by many as inconsistent with the laws of life and organization. It afforded me, however, the highest gratification to find, that views relating to health and disease, upon which I had expressed the strongest opinions, were favourably entertained, in the highest scientific circles, and that an increasing conviction of their truth prevailed. This induced me to pursue the subject; and, in answer to the invitations I received, the publication of a general work on the blood was announced.

The circumstances which retarded the fulfilment of this pledge are the following:—The general promulgation of the theory of cell growth, by Schleiden and Schwann, occurred coetaneously with the publication of the lectures on the Blood; and it became manifest, that, if the new theory should sustain its ground, it must materially modify many of our more recondite views of the phenomena of life. Two years subsequently, and before the cell theory had been thoroughly investigated and verified, Dr. Justus Liebig gave to the world his Animal Chemistry, or "Organic Chemistry in its Application to Physiology and Pathology." Not only the phenomena of cell growth, but the doctrines contained in this work, were so remarkable, and applied so directly and so extensively to the subject of the blood, that it became absolutely necessary to pause until the voice of the Profession had been heard, as to the validity of the facts and opinions which they embraced. Liebig's Work was, in the first instance, not very well received in this country, and in many essential particulars he was misunderstood, even by those who undertook to review his labours. Feeling the vital importance of a just appreciation of this eminent man's statements, not only in a general point of view, but particularly in reference to the blood, I undertook a reperusal of the Work itself, and of the various strictures which had been made upon it, and subsequently published a series of commentaries, entitled "Liebig and his Reviewers," which were republished in Germany, and in a letter addressed to me by the Professor himself, met with his unqualified approbation.

The events in the history of medicine, here referred to, have not been the sole causes of the delay in question. Circumstances propelled me into the vortex of the medico-political agitation which has now existed for so many years, and exacted of me, as it has of many others, the performance of duties as little consonant with my habits of life as congenial to my tastes; from time to time interrrupting, and for lengthened periods totally precluding, every scientific pursuit. I have felt it an imperative duty, in co-operation with others, to employ my best exertions in the endeavour to harmonize the existing chaos, and to bring about a more peaceful and advantageous condition of the Profession; and, acting as the representative of a class, I felt little inclined, during the heat of party warfare, again to become an author. I enter into these details, not merely as an apology to those who took so much interest in my lectures on the Blood, but as an explanation of the causes which have induced me, in this series, to apply the facts and principles contained in my former papers, and those which subsequent observation and research have supplied, to the elucidation of one specific blood disease, viz., Tuberculosis; and I have selected this particular disease for many reasons, which will appear in the sequel.

Fully aware that many of the generalizations attempted by Liebig have proved failures, I have still no hesitation in declaring my conviction, that the approximation to mathematical precision attained, and the comprehensive basis given to animal chemistry, in the school of which Liebig is the founder, combined with the discovery and the development of many of the laws of cell growth, are giving an entirely new face to theoretical medicine. At the same time, but a very partial application of these branches of science has been made in practice. The Profession, as it appears to me, has by no means followed to their legitimate results the reasonings which necessarily flow from a comparison of the facts. This being my conviction, it is my intention, for myself and others, to bring its validity to the test. In these lectures tuberculosis will be regarded strictly as a disease of the blood, and all the facts relating to it of which I am cognizant, including the chemistry and micro-chemistry of tubercle, and the aberrations observed in the phenomena of cell growth, will be referred to it as such. Those diseases which are but local manifestations of the blood disease, as, for instance, phthisis pulmonalis, will thus be regarded in a novel point of view, and the whole subject treated in a manner totally differing from anything at present to be met with in the records of medicine.

The importance of the subject cannot be overrated. Abstracting midwifery and sexual diseases, tuberculosis comprises at least one-third of the practice of physic and surgery. In bringing my own views of this universal disease under the consideration of the Profession, I wish it to be understood that I advance nothing dogmatically. I solicit the reflecting Practitioner to consider the entire mass of facts as the development of one great question. *In relation to the laws of organization and the physiology of man, is d sease here regarded consistently with the nearest approach we can make to a knowledge of its real nature?* Whatever reply may be made to this question, no injury can result from propounding it. Neither the philosophy nor the practice of medicine is sufficiently stable to preclude a novel idea, to render impossible a more comprehensive theory, or to defy a more consistent practice; and if, in any attempt to reconstruct our materials, and to revise our dogmas, we fail in reducing them to a perfect system, founded upon unerring principles, one advantage at least must accrue, we shall detect, in the language of Lord Bacon, "what parts of the subject have been prosecuted, and what omitted." The endeavour "may be but as an image in a cross-way, that may point out the way, but cannot go to it;" still, by noting "the omissions and deficiencies," the labours of others may be brought into play, new principles of medicine may be discovered, and thus, by the productions of the humblest individual, the great cause of human amelioration, if not directly, may be indirectly promoted.

Tuberculosis is a disease which occurs in all climates, and affects a great proportion of the human race. Under all the circumstances of difference of locality, hygiene, and customs and habits of mankind, and in the different races and

sexes, it is specifically the same disease. It has hitherto been referred to by writers as a cachexia or diathesis. The first of these terms was employed by the nosologists, to designate a class, including affections of the most varied and frequently opposite characters; as, for instance, scurvy, chlorosis, leprosy, gangrene, and psora.(a) By more recent writers the word has been employed to designate the general symptoms attending a local disease, and it is thus that Sir James Clark has described the "tuberculous cachexia." The word "diathesis" is more indefinite; it is mostly employed to designate the state of the constitution in which a multiplication of local affections occurs. Tuberculosis is, undoubtedly, a cachexia, but many other diseases belong to the cachexiæ, and a grave theoretical and practical error results from the use of the term, since it is frequently made to imply, that the general symptoms are produced by the local disease. It is my intention, in these lectures, to treat of tuberculosis, neither as a cachexia nor as a diathesis, but as an idiopathic malady affecting the blood. I shall make the attempt, which has never been made before, to distinguish, in tuberculous diseases between—1. The history, symptoms, and treatment of the original disease of the blood; 2. The local complications; 3. The general symptoms resulting from the local manifestations, and supervening on and complicating the original disease. Tuberculosis will therefore, in the first instance, be regarded as an idiopathic blood disease, under the following heads:—

1. The tuberculous predisposition.
2. The signs and symptoms of tuberculosis.
3. The causes of tuberculosis.
4. The special and general pathology of tuberculosis.
5. The treatment of tuberculosis.

Having thus fully treated of tuberculosis, I propose to terminate with an enumeration of its principal varieties, and to make one of the most important of these, viz., tuberculosis pulmonalis, the subject of a distinct investigation.

1. OF THE TUBERCULOUS PREDISPOSITION.

The truth of the observation, that tuberculous diseases are most likely to occur in individuals presenting certain marked peculiarities of constitution, has been universally admitted, and this state of constitution has, very generally, been designated the "predisposing cause" of such diseases; but the tuberculous habit, as presented to the view of the practitioner, is not simply a predisposition to be acted upon by the causes of a disease, it is an assemblage of phenomena, depending upon, and already produced by, the same cause as the signs and symptoms of the disease itself.

These phenomena consist in an imperfect or perverted nutrition of certain structures, and an incomplete or irregular development of certain organs and parts of the animal economy, with corresponding modifications of the functions of life. They depend upon a deviation from the perfect chemico-vital constitution of the blood.

That the blood is the true starting point whence the speciality of this constitution proceeds, is shown by the hereditary tendency of tuberculosis, to which we shall subsequently refer. The fecundating principle of the germ of the species is elaborated in and furnished by the blood of one parent, and the fœtus is nourished and its organs developed from the blood of the other parent; throughout life, the proximate elements of food are necessarily reduced to a fluid form, and conveyed into the blood, where they are assimilated and converted to its own nature before they are fitted for nutrition; æration, decarbonization, and other processes of depuration and transformation of the elements of nutrition take place in the blood, by which, in health, this fluid is continually renewed and fitted for the production of a perfect blastema for the growth and renovation of all the animal structures; the aberrations of nutrition, and the imperfect development of the various parts of the frame, exhibited in the tuberculous predisposition, are, therefore, properly regarded as secondary to some modification of the blood itself.

OF THE BLOOD IN THE TUBERCULOUS PREDISPOSITION.

Pathological chemistry has not at present developed the special character of blood diseases. In the actual state of science, we are scarcely justified in the expectation that the differential constitution of so complex a fluid, and the variations in quality of its constituent parts, will be so far ascertained as to lead to the discovery of their essential nature. Our powers of observation, aided by the instruments of science, have enabled us, at present, to determine very little more respecting it than certain well-marked physical properties, the chemical constitution, and the proportional quantities of some of its more important constituents and products, the occasional admixture or combination of heterogeneous materials, and a few of the more obvious microscopical phenomena. Nevertheless, analysis has developed many facts, and we have been enabled to arrive at certain general conclusions, of more or less importance, as to the state of the vital fluid in many diseases; and, as respects tuberculosis, in its various phases and stages, not only has no doubt been left that the chemical and physiological standard of the blood is very widely departed from, but some of the characters which mark its diseased condition have been very clearly ascertained.

For the purpose of forming an opinion of the condition of the blood in the tuberculous predisposition, I shall recite the observations which have been made on the physical properties of blood drawn from a vein; the appearances said to be presented on inspection, with the aid of the microscope; and the chemical analyses of blood, in cases of scrofula, and in incipient cases of those varieties of tuberculosis which result from the local deposit of tubercle; as in phthisis. The whole of these analyses have been recorded since the publication of my lectures on the blood, and their introduction in this place is the more important, since it will be necessary to refer to them repeatedly throughout the present course.

(a.) *Of the Physical Properties of Venous Blood in Scrofula and Incipient Phthisis.*—It is much to be regretted, that we possess but few direct observations relating to the properties of the blood in the predisposition to tuberculous diseases, nor until local disease has declared itself. Many writers, as Baumes, Denis, and others, state, that they have observed in scrofulous subjects, that the constituents of the blood are less intimately mixed than usual; that coagulation takes place readily, but the clot is small in proportion to the serum; and that the contractility of the clot is also imperfect, and hence is soft and feeble, and may even be diffluent, returning generally to its fluid state. Dubois gives a similar description of the blood in scrofulous cases; but he states, that coagulation takes place slowly, and that the serum itself is more aqueous, and accordingly of lower density.

As respects incipient phthisis, Andral affirms that the clot is small, but sufficiently dense. The serum is described by some observers, not only as being in large proportion to the clot, but as deficient in colouring matter, and by Dubois and others as occasionally tinged with the red colouring matter of the blood. Some writers, as Sydenham, Boerhaave, Burdoch, and Parr, remark, that the blood is brighter and more of a vermillion tint than natural in individuals of a scrofulous and consumptive habit. I do not find the remark repeated by the more recent writers; but in those conditions of the system in which the blood exhibits a very different tint, as in many chronic states and in advancing age, where it retains in some measure its venous character, tuberculosis becomes less frequent; and in *cyanosis*, in which there appears to be an exemption from tuberculous disease, the blue tint may be taken as a visible sign of a state of blood totally differing from, if not absolutely opposed to, that which obtains in tuberculosis.

Assuming the characters here described from the appearances presented by venous blood, drawn from subjects more or less affected with local disease, to have been correctly observed, we have to estimate how far they depend upon the original disease of the blood, and how far upon the superinduced local affection. The discrepancies in the statements of different pathologists relating to the degree of contractility of the clot most likely arise from the modified fibrinous condition which attends local and general inflammatory action. Andral explains the firmness he observed in the clot of blood drawn in the early stage of phthisis on this principle, there being a diminution of corpuscles, and a normal or an increased proportion of fibrine. Making allowance for the latter circumstance, and appealing to my own observations for many years past on the physical state of the blood when drawn from tuberculous subjects, I consider that it un-

(a) Vitiosus corporis habitus quoad volumen, æqualitatem, levitatem et colorem.—*Sauvages, Nos. Method. Class X.* Totius vel magnæ partis corporis habitus depravatus; sine pyrexia primaria vel neurosi.—*Cullen's Nos. Class.* III.

equivocally indicates a low degree of plasticity in the liquor sanguinis depending upon a diminution of the fibrine producing power, and a degraded condition of the fibrine itself.

(b) *Of the Microscopical Characters of Blood in Scrofula and Incipient Tubercular Disease.*—Dubois (d'Amiens) made numerous observations on the microscopic characters presented by the venous and capillary blood of scrofulous and tuberculous subjects.(a) According to his description, the colouring matter frequently appeared as if extravasated and separated from, or adhering loosely to the corpuscles. When the serum was of a rose colour, which frequently happened, the serum and corpuscles presented the same tint; but when the serum was very limpid, and the clot of a deep colour, the colouring matter appeared to be stretched in layers, sometimes at a distance, and isolated from the corpuscles, or sometimes confounded with them. He constantly found both spheroidal and lenticular corpuscles, their volume not being sensibly diminished, and the former presenting no peculiarity, but the latter manifestly altered in form; some having a circular point at the centre, so transparent as to make them appear perforated, resembling wheels, others being irregularly circular, or elongated and notched. Arterial blood, which he once examined, did not differ materially in these characters.

Lebert (b) states, that in tuberculous and scrofulous subjects, he sometimes observed the corpuscles of a lighter colour and less regular formation than usual, but he places very little reliance on these microscopical observations, and remarks very forcibly on their inconstancy and general vagueness, on the difficulty of appreciating minute shades of colour, and that the peculiarities observed do not specially characterise tuberculous affections, but are met with in other diseased states of the blood. Mr. Nicolson, however, affirms, that in scrofula the corpuscles under the microscope are lighter-coloured and irregular, their circumference being, as it were, notched and divided. Mr. Phillips(c) observed the colouring matter apparently dissolved in the serum, but it was usually after the blood had been drawn several hours; and he regards it as a consequence of a disposition to early decomposition; and lastly, Dr. Glover states, that he has found the blood corpuscles altered in form in some cases of scrofula, viz., irregular in their outline, star-shaped, and sometimes studded with granules, but he does not consider the appearance abnormal.(d)

(c) *Of the Chemical Constituents of Venous Blood in Scrofula and Incipient Tuberculous Diseases.*—No investigations have been undertaken with the specific object of determining the chemical composition of blood in the tuberculous predisposition simply. The analyses hitherto recorded have been made in states of the system wherein something more than a predisposition existed, as, for instance, in confirmed cases of scrofula, and in cases where phthisis, as a local disease, had unequivocally declared itself. The predisposition to tuberculosis and phthisis is, however, regarded by most pathologists as no other than scrofula, and a reasonable inference may be drawn, that in cases of phthisis, during the period in which tubercles remain in a crude state, the blood from which the tubercle was derived was simply tuberculous; that is to say, but little or not at all complicated with those modifications which, it will be afterwards shown, result from the local development of tubercles. In the absence of direct investigation, then, the state of the blood in scrofula generally, where hectic fever does not exist, and at the earliest possible period after the development of tubercles in an organ, would enable us to infer, with considerable probability, the characters which it presents in the tuberculous predisposition.

In Scrofula.—Mr. Nicolson's Analyses.—Mr. Nicolson subjected to analysis a vast number of specimens of blood taken from patients in every stage of scrofula, and published the following table, as representing the averages of all his examinations. For the purpose of comparison, I have affixed the mean of these averages, and also the generally admitted standard for healthy blood.

No.	Corpuscles.	Fibrine.	Dissolved substances in serum.	Water.
1	101	3	79·5	816·5
2	98	2·8	79	820·2
3	98	2·4	79·1	820 5
4	97	3	79	821
5	96·5	2·5	78	823
6	80	2·3	78·7	839
7	79	2	79	840
8	79	2	80	839
9	63·5	1·2	80	855·3
10	64	1·8	79	855·2
11	65·5	1·7	78·5	854·3
12	64	2	79	855
THE MEAN OF THE ABOVE AVERAGES.				
1·12	82·12	2·22	79·06	836·6
THE PHYSIOLOGICAL STANDARD.				
	127·426	2·952	78·244	791·378

2. *Dr. Glover's Analyses.*—These analyses have manifestly been made with great care. They are described *seriatim* in Dr. Glover's work, but I have reduced them to a tabular form, as more convenient for reference and comparison in these lectures.

CONSTITUENTS OF THE BLOOD, ACCORDING TO THE ANALYSES OF DR. GLOVER, IN EIGHTEEN CASES OF VARIOUS FORMS OF LOCAL DISEASE REGARDED AS SCROFULA.

No.	Sex.	Age.	Case.	Water.	Solids.	Fibrine.	Solids of Serum. Organic	Salts by incineration.	Corpuscles.	Fats.	Spirit Extract.	Water Extract.
1	M.	15	Ulcerated Glands	816·40	183·060=1000	4·030	79·030=73·90	5·40	100· 00	—	—	—
2	M.	14	Hypertrophied Glands, Diseased Bone, &c.	803·44	196 056=1000	4·000	90·019=84·13	5·76	102·037	—	—	—
3	M.	13	Lupus Vorax	790·00	210·000=1000	3 050	87·000=80·40	6·60	119·050	—	—	—
4	M.	16	Scrofulous Cervical Glands	798·00	202·000=1000	3·000	99·070=94·70	5 00	99 030	—	—	—
5	M.	33	Do. Do.	804·86	195·014=1000	1·030	90·220=83·20	7.00	103·064	—	—	—
6	M.	16	Do. Do.	776·13	223·087=1000	1·044	89·041=83·32	6·09	133·002	3·51	—	—,
7	M.	30	Enlarged Gland, Suppurating	784·59	215·410=1000	3·720	79·690=73·19	6 05	132·100	4·90	—	—
8	M.	34	Scrofulous Swellings of Neck	794·09	205 001=1000	4·005	79·006=73 01	6 05	121 000	·8	·2	7·8
9	M.	20	Scrofulous Swelling	806 00	194·000=1000	2·091	89·008=83 05	6·03	102· 01	—	—	—
10	M.	25	Swelled Glands, Cicatrices	773·01	226·009=1000	2 006	87·030=80·75	6·55	137·030	4·30	2 0	6·1
11	M.		Scrofulous Glands of Neck	764.01	235.099=1000	4·000	91·050=84·70	6·80	140·049	—	—	—
			Mean	791·94	208·005=1000	3 132	87·060=81·38	6·22	117· 32	—	—	—
12	F.	29	Scrofulous Impetigo and Diseased Bone ...	785·04	214·006=1000	3·003	101 030=91·03	7·24	110·000	—	—	—
13	F.	29	Scrofulous Tumour of Breast	824 02	175 008=1000	4·007	68·006=62·01	6 05	102·005	—	—	—
14	F.	21	Diseased Bones	781·94	218·006=1000	3.051	93·060=86·12	7·48	120 095	—	—	—
15	F.	37	Swellings of Neck and Axilla	794·20	205·080=1000	4·005	91·078=85·18	6·60	109 052	1·48	—	—
16	F.	24	Swellings and Ulcers of Neck	807·49	192·051=1000	3 003	69 042=63·20	5·82	119·079	—	—	—
17	F.	19	Scrofulous Swellings of Neck	783·07	216·003=1000	2 002	87 006=81·02	6·04	126·0·5	—	—	—
18	F.	18	Goitre	819·34	180·066=1000	2·073	89·030=82·43	6 87	88·063	—	—	—
			Mean	795·18	200·053=	3·046	85 091=79·18	6 70	111 012	—	—	—

In Incipient Phthisis.—There are numerous analyses of the blood in phthisis, by chemists of the highest character; but these have nearly all been made with blood derived from phthisical subjects, in the advancing stages of that disease, and are accordingly of no avail to assist us in determining its state in the same subjects before disease

(a) "Dictionnaire de Médecine," t. xxviii., p. 224.
(b) "Traité Pratique des Maladies Scrofuleuses et Tuberculeuses," p. 32.
(c) On Scrofula, 1846, p. 57.
(d) "On the Pathology and Treatment of Scrofula," 1846, p. 118, note.

of the lungs occurs. They will be recorded in future lectures. It is only necessary, at present, to introduce or refer to the few which have been made expressly with blood from individuals in whom tubercles existed in a crude state, since it is from them alone that we can draw an inference as to the state of the blood in the constitutional affection which precedes the deposit of tubercles in the lungs.

Dr. Fricke, of Baltimore, analysed the blood in eight cases of pulmonary tubercles, in four of which they were in a crude state. I introduce these four cases, with their mean proportion, and have appended the standard, adopted by the same author, of the blood in health.

No. of cases.	Solids in 1000 grains.	Water in 1000 grains.	Fibrine.	Red Corpuscles.	Solids of the Serum.	Ditto proportionate to the whole solids.	Iron.	Lime.	Chlorides of Soda and Potassa.	Phosphates of Soda and Potassa.
1	212·631	789·369	3·395	125·645	86·546	87·23	·564	·272	2·530	·336
2	199·656	800·334	2·688	111·453	85 525	90·30	·487	·257	5·632	·197
3	200·602	799·398	2·862	117·480	80·260	81.31	·512	·276	4·822	·203
4	207·007	802·993	2·159	104·600	100·248	101·46	·416	·283	2·910	·351
Mean	204·976	798·021	2·776	114·794	88 144	90·82	·494	·277	3·973	·271
Health	208·622	791·378	2·952	127·426	78·244		·582	·183	4·822	·874

Date of Sickness.—Case 1, August 20. 2, March 22. 3, June 1. 4, October 1.

Mr. Nicolson's Table shows, for cases of scrofula generally, a diminution of solid constituents, and a consequent increase of water; a diminution of corpuscles, and a diminution of fibrine. It is to be observed, that the cases of scrofula having been taken generally, the deviation from the healthy standard in some of the constituents most likely presents a different figure to what it would if the cases were classified. This remark applies especially to the fibrine, for in all probability some of these cases were attended with more or less hectic fever, and, as it will afterwards be shown, that hectic fever is always attended with an increase of fibrine, this circumstance would raise the average of the fibrine.

Dr. Glover's analyses show that, in every instance, the proportion of the red corpuscles was diminished, and, in most of the cases, very considerably.(a) The solids of the serum were universally increased. The proportion of water to the solids was also generally increased. The fibrine gave an average cypher, for the males, 3·132; for the females, 3·585; but in three cases it was below the natural standard, viz., 1·36, 1·44, and 2·1. As respects the latter constituent, the same remark is applicable here as to Mr. Nicolson's results; in all the cases there was more or less local inflammation, and probably general inflammatory fever, in which the proportion of fibrine in the blood is increased. The cypher for fibrine is manifestly lower than it would be if either local inflammation of the same parts, or general inflammatory action occurred in individuals whose blood was previously healthy; and I think a careful consideration of these analyses leads inevitably to the conclusion, that in tuberculosis the proportion of fibrine in the blood is below the physiological standard. The increase of solids of the serum consists chiefly of the albumen, and very little, if at all, of the extractive matters. The fatty matters were generally increased, although, in one instance, they were remarkably diminished, and the average amount of the salts of the serum was nearly the same as in healthy blood.

The Table drawn from Dr. Fricke shows, for cases of incipient phthisis, a diminution of solid constituents, and a consequent increase of water; a diminution of corpuscles, and a slight diminution of fibrine. It also shows a slight increase of albumen for the whole blood, and a great increase of the same principle in proportion to the remainder of the solids in the blood; a diminution in the quantity of iron, and of the phosphates and chlorides of soda and potassa, and an increase in the quantity of lime.

We have, in the next place, the analyses published by Andral and Gaverret. In six patients, affected with crude tubercles in the lungs, uncomplicated with any other affection, Andral found that the proportion of fibrine varied from 2·7-1000ths to 3·5-1000ths, which, according to the standard adopted by him, although rather low, is within the physiological limit. In a patient who died of tubercles in the membranes of the brain, without any inflammatory complication, the proportion of fibrine in the blood was, upon one occasion, 3-1000ths, and upon another 3·4-1000ths. In the whole of the six patients affected with tubercles in the lungs, from the earliest period, when the existence of the local disease could scarcely be recognised, the proportion of the red corpuscles was found to be diminished. The maximum proportion of this part of the blood, in 1000 parts, being 122, the minimum 99, and the normal proportion, adopted by Andral, 147. In Andral's cases the red corpuscles oscillated from 100 to 120, their cypher being generally nearer the latter than the former, and in no one instance did they reach the physiological standard.

Becquerel and Rodier analysed the serum of sixteen phthisical patients; but the blood was drawn, in all the cases, to relieve either hæmoptysis, violent febrile action, or inflammation; and, accordingly, they were so complicated, that the results offered no criterion of the state of the blood in the tuberculous habit, simply considered: nevertheless, these physiologists recognise a diminution of the corpuscles as constituting a part of the anæmia of this disease, and they refer the increased proportion of fibrine in tuberculous subjects to inflammatory complications.

Professor Schultz remarks:—"The blood being alkaline in its healthy state, and two drops of acetous acid neutralizing a drachm of serum, he found the serum in one scrofulous subject quite neutral; and in another scrofulous subject, one drop of acetous acid neutralized four drachms of serum."

From the preceding analyses, it appears that the morbid condition of the blood in tuberculous diseases is characterised by a deficiency in the quantity of the red corpuscles. With respect to the albumen, it is stated by Andral, in which statement Glover, Fricke, and also L'Heretier agree, that it is augmented in quantity; and the two latter affirm, that it is imperfectly developed and defective in quality. Andral believes that tuberculous matter is never deposited until the corpuscles are diminished in quantity, and Fricke adds, "nor until the albumen is increased in proportion." The analyses and the statements of Burdoch, L'Heretier, Andral, Nicolson, Fricke, Becquerel and Rodier, and others, all lead, as it appears to me, to the conclusion, that the fibrine is below rather than above the healthy standard; and, from the loose coagulability of the blood, even where there is an absolute excess of fibrine, it may also be inferred, that this principle is defective in its nature. Some pathologists have lately maintained, that the blood contains less of the fatty principle in this constitution than in health. The increased proportion of the albumen, if it exist, by no means compensates for the diminished proportion of the corpuscles, and accordingly the water is unquestionably increased in relation to the solid constituents. Dr. Fricke's analysis shows an increase above the standard of health, in the lime, and a decrease in the phosphates; while L'Heretier states, that in scrofula the earthy salts are diminished. Many of the observations recited in this lecture require confirmation or correction; but they are sufficient to enable us to arrive at the general conclusion, that the blood of tuberculous individuals, in reference to some at least of its most important principles, is degraded in quality, and that it is endowed with a low degree of vitality.

But the question now before us is, the state of the blood in that condition of the system which precedes the actual development of tuberculous and scrofulous disease,—a condition attended with a great variety of structural and functional phenomena, which I purpose to describe minutely in the following lectures. It will be made evident, that the phenomena of the tuberculous predisposition are very generally the same as those observed in decided scrofulous and tuberculous disease; and it is a legitimate inference, that defects of the organisation, and deteriorated functions of the same nature, however they may differ in degree, depend upon the same cause. If the signs and symptoms of tuberculosis either depend upon, or are attended with a special morbid condition of the blood, the presumption is, that the signs of the predisposition depend upon a similar morbid condition of the blood. Although the facts embraced in this lecture appertain to tuberculous subjects in a state of local disease, yet the condition of the blood in the predisposition may, on careful consideration, be inferred by allowing for any special deviation from the physiological

(a) "On the Pathology and Treatment of Scrofula," p. 92.

standard, which is known to be produced by the supervention of any disease which may have presented itself in such subjects; as, for instance, the increase of fibrine which attends local and general inflammatory action. Abstracting the effects of the inflammatory action, the remaining characteristics may be presumed to belong to the general constitutional affection. The predisposition differs from the general disease only in degree, and the condition of the blood in the predisposition is the same, differing also only in degree. All observation confirms this view. In individuals enjoying comparative health, but of a tuberculous habit, the blood may not exhibit the decided deviations from its healthy condition here indicated, or, at the period of making an observation, it may even be perfectly healthy; or it may exhibit the minutest shades of those deviations from health, which obtain in tuberculous affections; but at the period when the foundation of the tuberculous habit was laid, and when the structural modifications were produced, whether during intra or extra uterine existence, the blood or its embryotic analogue must have been, in a greater or less degree, tuberculous.

The following diagram, drawn from the preceding observations and analyses, exhibits at one view what I believe to be the state of our knowledge of the blood as it circulates during life, with its resolution into its chemical constituents, when drawn from the vein of an individual predisposed to tuberculosis:

- **Tubercular Blood**, defective in Vital Properties: the essential nature of the defect unknown.
  - **Red Corpuscles**
    - Deficient in Number.
    - Defective in structure?
  - **Liquor Sanguinis** Vitiated in quality,
  - **White Corpuscles?**

Producing on Chemical Analysis,

- Globulin *deficient.*
- Hæmatin *deficient.*
- Iron *deficient.*
- Water *in excess.*
- *Albumen in excess, but defective in quality?*
- Fibrine, *rather below than above the healthy standard, and defective in quality.*
- Extractives?
- Fats? *Probably deficient.*
- Colouring matters *modified.*
- Alkaline salts *deficient?*
- Earthy salts *deficient?*
- Lime *in excess?*
- Gases?

A diminished vitality thus appears to be the most general character of the blood in tuberculosis, and we terminate this section by defining the idea we attach to this expression. In living matter, the degree of vitality is measured by the sum of vital actions, comprising not only chemical and physical changes produced under the influence of the vital force, but actions referrible to the vital properties of irritability and sensibility. The healthy constitution of man corresponds with a physiological range of vital actions in the blood and the living tissues, but especially in the blood. These actions, as respects the blood, consist in all the molecular changes which take place in hæmatosis. They comprise those which result from the dynamic property of endosmose in the corpuscle, as well as those which mark its organic contractility; the assimilation of old and new matter to the form of blood; the formation of red corpuscles and liquor sanguinis; the consumption of red corpuscles; and the waste of liquor sanguinis in nutrition. When the sum of these molecular actions is within the physiological range, and they are in harmony with each other, a sufficient number of corpuscles being formed and consumed, and all the constituents of the liquor sanguinis being atomically complete, and of normal proportion, and wasted and renovated in proportion to the requirements of the living structures, the blood has a healthy degree of vitality; but in tuberculosis the sum of these actions is below the physiological range, and, moreover, the proportions and qualities of the constituents of the blood are deranged. This marks a low degree of vitality, and, as we shall see, is consistent with all the phenomena of the tuberculous predisposition, and with the signs and symptoms of tuberculosis in its various forms.

[To be continued.]

Dr. Butter, who has been twenty-five years in the Indian service, and was one of the Directors of the Benares Bank, has been dismissed the service by sentence of a court-martial, for inducing persons to purchase shares in the bank, by a series of misrepresentations, the consequence being the ruin of the shareholders.

ORIGINAL COMMUNICATIONS.

NOTE ON THE FORCE OF FECUNDITY IN PHTHISICAL SUBJECTS.

By W. H. WALSHE, M.D.

Professor of Medicine in University College, Physician to University College Hospital, Consulting Physician to the Brompton Hospital for Consumption, &c.

With the view of contributing to the solution of the problem, *whether the tuberculous diathesis intensifies or weakens the force of fecundity in the female, and of the procreative faculty in the male*, I some time since collected a certain number of cases of phthisis, carefully noting the number of years the individual had been married, and the number of children and miscarriages the patient herself had had, if a female, or had occurred in the person of his wife, if he were a male. As essential elements in the inquiry, the age and the duration of illness at the time of observation were in each instance included. The number of cases I have at command amounts to 91; the greater part observed among the out-patients of the Consumption Hospital, when existing in embryo at Chelsea. This number is, doubtless, too small to furnish a final solution to the problem (especially as the investigation is beset with no small number of sources of fallacy), but, nevertheless, may be considered capable of furnishing results approximating to the truth.

The first general results may be expressed tabularly as follow:—

Table I.

Showing the Mean Number of Children and Abortions resulting from Ninety-one Marriages, in which one or other Member was Tuberculous at the time of observation.

Number of Cases.	Mean Age in Years.	Duration of Phthisis in Months at Time of Observation.	Number of Years Married.	Number of Children (*)	Number of Abortions.
Males 35	37·28	27·07	11 03	2·51	0·46
Females 56	35·21	26·38	12·61	5·26	1·03
Both Sexes 91	36·25	26·73	11·82	3·88	0·79

(*) These numbers refer of course to all the children each individual may have had, *whether living or dead* at the time of observation.

The following inferences may be deduced from this table:

1. While the mean duration of the disease had been almost absolutely the same in the two series at the time of observation, the number of children was very materially greater from marriages, where the female was ascertained to be phthisical, than where the male was thus affected.

2. The greater prolific force of the phthisical female was further shown by the excess of abortions furnished by the female series.

3. Some allowance must be made for a slight excess of 1·58 years of duration of marriage in the female series. Hypothetically giving this excess of duration to the males, and so equalizing the duration in both series, and allowing (what is infinitely improbable, indeed, actually impossible) that two children would have been the mean result of the eighteen additional months (1·58 years) of male phthisical marriage, the mean number of children in the female series will still exceed that in the male by 1·50.

4. The mean number of children is greater in marriages in humble life, of which the female member is phthisical, than in marriages among the population at large, without distinction of age, health, or social station. The mean number of children to a marriage in England is about 4·51.(a)

5. When the male is phthisical, 4·03 years of cohabitation are, on an average, required for the production of a child; where the female is phthisical, 2·39 years suffice.

6. The male series of patients had, it appears, been 27·07 months ill at the time of observation, and at the time when 2·51 children had been produced; and the female had been 26·38 months ill at a time when they had produced 5·26 children. Now, as obviously these children could not have been produced within the periods of actual illness, the influence of constitutional tendency to phthisis,

(a) Enc. Britan. Ed. 7. Art. Population. P. 423.

as well as of the actually existing disease, must be considered to be examined in this inquiry.

We for the present pass over the results obtained from throwing the two series, male and female, into one, and turn to the comparison of the inferences just set down, with those obtainable from fairly comparable series of non-phthisical persons. To be fairly comparable, they should be as nearly as possible drawn from series of individuals in the same walks of life. The floating population of an hospital (that of University College) has therefore been taken for the purpose; all persons, whether affected with acute or chronic disease, have been indiscriminately used, with the sole exclusion of those having tuberculous symptoms. The results are numerically expressible as follow:—

TABLE II.

Showing the Mean Numbers of Children and Abortions resulting from 220 Marriages, (in an hospital population,) in which neither Member was Phthisical at the time of Observation.

Number of Cases.	Mean Age in Years.	Number of Months Ill.	Number of Years Married.	Number of Children.	Number of Abortions.
Males 89	42·73	23·63	17·25	5·11	1·13
Females 131	42·40	19 78	17·72	4·31	1·12
Both Sexes..... 220	42·57	21·71	17·48	4 71	1·12

From this Table the following inferences may be drawn:—

1. The mean period of illness had been greater in males than in females at the time of observation, and the number of years of marriage the same in both series; yet the ratio of children in the male was to that in the female series as 5·11 : 4·31.

2. In non-phthisical males, 17·25 years of marriage gave an average of 5·11 children; in non-phthisical females 17·72 years of marriage an average of 4·31 children: 11·03 years of male phthisical marriage (see Table I.) gave a mean progeny of 2·51 children; 12·61 of female phthisical marriage, a mean issue of 5·26 children.

3. If in phthisical males the procreative faculty were as strong as in the non-phthisical, (Table II.,) the proportion of children produced by the former (making allowance for the difference in the number of years of marriage in the two series) would be 3·15 instead of 2·51.

4. In females the state of things is very different. Twelve years of cohabitation, phthisical on the female side, produced a mean excess of about 1 child over 17 years of cohabitation, non-phthisical on the female side. Raising the period of female phthisical cohabitation hypothetically to 17·72 years, the number of children at the female phthisical rate of production would be 6·06, instead of 4·31,—that observed when the female was non-phthisical.

5. But is this latter procedure correct in principle? May it not be that in the series of non-phthisical females, whose mean age was greater than that of the phthisical by 7·19 years, this excess was at a time of life (namely, past the age of 35, see Table II.,) when female fecundity has naturally fallen so low, that that span of years might be altogether a negative quantity in regard of productiveness? The intensity of fecundity at different ages has not, so far as I am aware, been calculated for this country; but in all probability it does not much differ (seeing that the period of menstruation is about the same) from that existing in certain countries more northern than our own, where the rate of that intensity has been ascertained. Thus, in Sweden and Finland (a) the intensity in question, which continues pretty uniform from the age of 25 to 40, falls from the age of 40 to 50 to one-fifth of its previous amount. Applying this result to our own cases, it would follow, that 2·50 years of the 17 of marriage of our non-phthisical female series might be regarded as comparatively unprolific (as a matter of necessity, from the age of the individuals); that hence all those years cannot justifiably be added hypothetically to the years of phthisical cohabitation as probably fruitful ones; and that hence, finally, the excess of phthisical fecundity is not altogether so great as would appear from the calculation made in the last paragraph, No. 4.

It follows, from the data now set forth, that, in general terms, the procreative power of phthisical males is below the average,—the fecundity of phthisical females materially above it; and hence that, to whatever extent phthisis be a disease propagable from parent to child, the danger of its extension thus is greater from the marriage of tuberculous females than males. It may further be concluded, that the tendency to early marriage, which I formerly showed to exist in the phthisical of both sexes,(a) ought, in females, to be discouraged, especially if the researches of future observers should prove that the *phthisis of infants* (differing from that of adults) is, to any prominent degree, an hereditary disease. Early marriage was, at one time, supposed to be useful to the phthisical female herself; but accurate observation fails to warrant the idea.

But, taking the two sexes together, and regarding them as phthisical stock prepared to propagate, it is obvious that the female activity is counterbalanced, to a certain extent, by the male inactivity. This is well seen in the following:—

TABLE III.

(Deduced from Tables I. and II.,) showing the Mean Results of Male and Female Productiveness, in Phthisical and Non-phthisical Persons.

Sex.	PHTHISICAL.		NON-PHTHISICAL.	
	Years married.	No. of Children.	Years married.	No. of Children.
Male	11·03	2·51	17·25	5 11
Female	12·61	5·26	17·72	4·31
Both	11·82	3·88	17·48	4·71

So that 11·82 years of phthisical cohabitation produce a mean of 0·83 children less than 17·48 years of non-phthisical cohabitation. At the phthisical rate of production, the produce would, in 17·48 years, equal 5·74 children, instead of 4·71, as in the non-phthisical series. On grounds already explained, (paragraph 5,) it is clear that this is somewhat above the real excess; still, it must be admitted, these facts go to prove that there is, to a certain amount, a greater tendency in tuberculous stock to multiply than in the population at large. That tendency is, however, slight in amount,—so slight as not, by any means, to vitiate the inference I formerly drew (Report Loc. Cit.,) as to the great amount of non-hereditary phthisis in each generation of the adult hospital population of this country.

(a) Milne on Annuities, Vol. II. p. 582.

ON DISPLACEMENT OF THE OVARY.

BY EDWARD RIGBY, M.D., &c.;

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DURING the last three years, I have had occasion to notice several instances of a painful affection of the pelvic region, which I had not observed before, and which, as far as I know, has not yet been described. It is characterised by intense and peculiarly sickening pain about the sacral region, extending to one or other of the groins, and coming on in paroxysms of such agonising severity as to render the patient perfectly frantic with the intolerable suffering. In some patients the intermissions of ease were nearly or quite entire; in others, the pain, although divested of its characteristic intensity, never wholly abated. The source of the pain was evidently connected, directly or indirectly, with the rectum, for the passage of fæces was frequently attended with some difficulty, and always with great suffering.

According to the patient's feelings, it seemed as if a partial obstruction existed somewhere up the rectum, the smallest pressure upon which, by the passage of fæces, was sufficient to bring on a paroxysm of this much dreaded pain. At other times, she could scarcely tell what had been the exciting cause of the attack; for, like a fit of tic douloureux, it would frequently come on from no assignable reason, and cause her the severest sufferings for some hours. Patients describe the pain as being quite peculiar, and of a sickening and utterly intolerable character, such as they had never before experienced; indeed, from the descriptions which one or two have given of it, I should presume that it closely

(a) Report on Phthisis, *British and Foreign Medico-Chirurgical Review*, January, 1849.

resembles the intense and peculiar suffering, which patients describe in cases of orchitis. The pain was usually attended with great throbbing, and with a painful sense of forcing, or distension of the tender part, amounting almost to bursting, like something strangulated.

The menstrual periods have always been attended with intense pain, particularly during the early part of the discharge, though this varied a good deal in different patients, and (as far as I have seen) the discharge was invariably attended with exudations and small coagula. At these times the whole lower part of the abdomen was frequently tender to the touch, and more or less fever was generally present, probably arising in part from the degree of suffering which had been induced. The tongue always showed the dry short-napped fur which is so constantly seen in cases of disease,or displacement of the pelvic viscera; the digestive organs were much deranged, and not unusually the stomach was extremely irritable.

On making a vaginal examination, she would frequently wince, and complain as soon as the finger touched the os and cervix uteri; but a little care quickly sufficed to show that these parts were not morbidly tender, but that pain was produced by pressing them against the tender spot which was behind and to one side, in the direction of one or other of the sacro-iliac synchondroses, or sacro-ischiatic notches. On passing the finger, therefore, behind and to one side of the cervix, and pressing against the wall of the vagina in the above-mentioned direction, the painful spot is at once reached, and sometimes a slight degree of hardness is perceived.

On examining per rectum, the finger soon reaches the same acutely painful spot which had been felt per vaginam. The patient dreads the slightest touch of it, however carefully applied. It is evidently a convex body, like an enlarged gland, though usually softer, situated in the recto-vaginal pouch; it is moveable, if the patient can bear a sufficient amount of pressure for that purpose, and usually one or more vessels are felt throbbing when the finger presses upon it. The ovary is generally larger than natural, being more or less swollen from the strangulation produced by its displacement; and when the swelling is considerable, not only will pain be produced by pressing in the groin of the same side, but the ovary will be distinctly moved upon the finger per rectum. From the fact of its mobility can be explained the circumstance of our being able to feel it sometimes lower in the pelvis than at others, and why the patient is in greater suffering when it is so, than when felt higher up. Hence the passage of a solid mass of fæculent matter is attended with fearful sufferings; the ovary is pushed down by the fæcal mass as it descends through the rectum, until its attachments are put considerably on the stretch; a further amount of swelling is produced by this state of strangulation, and, in this condition, the fæcal mass is at length forced past, to the indescribable agony of the patient, frequently leaving her in severe pain for many hours afterwards.

In other cases, the ovary is nearly or quite fixed, having apparently contracted adhesions to the neighbouring parts.

It is not easy to speak decidedly as to the causes of this displacement, but I have chiefly, or almost solely, observed it among women of a lax, flabby habit, prone to passive menorrhagia, leucorrhœa, and abortion, but most particularly where the uterus has been retroverted. I have long since pointed out, that ovarian irritation or inflammation is a frequent result of retroversion in the unimpregnated state, arising probably from the tension to which the broad ligaments are exposed, and consequent engorgement of the ovary.

The diagnosis is not difficult, for the pain is quite peculiar. It is of a forcing, throbbing character, so sickening and utterly intolerable,as to be entirely different to any other pelvic pain with which I am acquainted. Its seat is referred to the upper and posterior part of the vagina, usually somewhat to the left side where the ovary can be felt, especially upon examination per rectum.

The direction in which we can best reach the painful spot will guide us as to applying leeches per rectum or vaginam; they pretty certainly produce much relief, although, so long as the displacement continues, it cannot be more than temporary. The grand object necessarily must be to restore the ovary to its natural position, and this, whether connected or not with retroversion, will be best obtained by the prone position. The patient soon learns by experience what amount of lying forwards will be required, but, as in cases of retroversion, it is generally found necessary to assume an extra degree of prone position for a few minutes (knees and elbows) previous to lying down upon the prone couch.

The following case, which I regret I did not take notes of, gives a good illustration of the symptoms and treatment of this condition. For the first part of this report I am indebted to my former pupil, Mr. H. Webb; for the latter to Mr. Renwick.—

E. H., aged 19, single; a short, healthy looking brunette.

May 6, 1848.—Complains of very severe pain in the loins and sacrum, especially on evacuating the bowels, attended with considerable bearing down; the pain is so intolerable as to make her roll and writhe upon the bed, clutching at anything within her grasp. Tongue coated with a white fur; pulse feeble, bowels open, urine natural.

℞ Pil. hydrarg. chloridi co. gr. v. Alternis noctibus.

℞ Acidi hydrochlor. dil.; acidi nitrici dil. aa ♏ viii. t. d.; ex infuso gentianæ co.

May 13.—Has been in great suffering during the week, and complains also of intense pain, coming on in paroxysms, in the left iliac region.

Examination per Vaginam.—Uterus slightly retroverted; os uteri very small; cervix contracted. Rep. pil. and mistura.

June 9.—General health better; but as the pain, which is evidently in the region of the left ovary, continued very severe, I admitted her into the hospital for women.

℞ Pil. aloes c. myrrha, gr. x. o. n. Rep. mistura. Let her use the prone position as much as possible.

June 19.—Lies almost constantly on her abdomen, in which position she is tolerably free from the ovarian pain. The catamenia appeared to-day, scanty and light-coloured, and attended with a return of the paroxysms of pain, which are very intense. Rep. med.

June 23.—Feels rather better. Remains tolerably free from pain when lying upon her abdomen.

Examination per anum.—Left ovary can be felt much enlarged, and is excessively painful when touched; severe pain is also produced when the uterus is pressed against the inflamed ovary during examination per vaginam.

Uterine sound, two inches and a half, passes in the right direction. Rep. med.

June 27.—Has suffered much since the last report.

Examination per Anum.—Left ovary not decreased in size and acutely tender. She has occasionally a very offensive aqueous discharge from the vagina.

Examination per Vaginam.—Vagina hot and dry; uterus in the natural position; pressure in the direction of left ovary causes intense pain. Let five leeches be applied to the upper and left part of the vagina.

July 4.—Leeches bleed freely; bowels rather confined; evacuations rather offensive.

℞ Pil. hydr., gr. v. per duas noctes; haust. sodæ tart. ter die.

July 7.—Has had a recurrence of the paroxysms of pain in the ovary.

Examination per Anum.—Left ovary still enlarged and very painful when touched.

Examination per Vaginam—Uterus in its natural position; bowels more healthy. Rep. haustus.

July 10.—Pain in direction of the ovary rather less. Rep. Med. Applic. per vaginam, hirudines vj. ovario sinistro.

July 21.—Was relieved by the leeching, and has been in less pain since.

Examination per Anum.—Left ovary is smaller, but still very tender. Bowels confined.

℞ Ol. ricini, ℥ss. statim. Rep. hirud. vj. ut antea.

July 25.—Catamenia appeared to day; the discharge is scanty. Is suffering severe pain in the loins and left iliac region.

Sumat morphiæ acet. gr. ¼ statim, and rep. horâ somni si opus sit.

July 28.—Menstrual discharge ceased yesterday; she is almost free from pain; is much thinner than when admitted, but feels in every respect much better.

Examination per Anum.—The ovary can scarcely be felt and causes her no pain.

August 1.—Has a very slight pain in the left iliac region, but in all other respects appears quite well. She was discharged at her own request.

She was again admitted into the Hospital for Women January, 1849. The report of her symptoms, for which I am

indebted to my friend and assistant, Mr. Renwick, is as follows:—Constant pain in the left iliac region and across the loins. No pain in the hip or thigh, but suffers very much in evacuating the bladder and rectum; bowels well relieved without medicine; tongue clean; urine generally high-coloured and thick; pulse regular, but weak. Catamenia occur every five or six weeks; with severe pain, rather profuse, and attended with clots and shreds.

Examination per Vaginam.—Causes excruciating pain; os uteri rather backwards; extreme tenderness on its anterior part, where an artery may be distinctly felt pulsating.

Examination per Rectum.—When either the ovary itself is reached, or the uterus pushed up against it, the pain is agonising. The same plan of treatment was pursued with good effect, and after a short time she left the hospital much relieved; she has since called there, having suffered little or no return of her former symptoms.

On making an examination per vaginam, one might have been induced to suppose that the cervix uteri was the part affected, from the intense pain which was produced on touching it; but a little attention sufficed to show, that the cervix itself was not the source of her pain, but had only produced pain when pressed against the painful ovary. The ovary itself was felt most distinctly both per vaginam as well as per rectum. Its position varied a good deal at different times; when in most suffering it was low in the recto-vaginal pouch, nearly corresponding to where the fundus uteri is felt in a case of retroversion. After using the prone position it receded considerably, and her sufferings diminished in proportion. The case was one in which I could do but little while she was an out-patient beyond attending to the general health. I therefore admitted her into the hospital for the purpose of having leeches applied, and for the sake of ensuring that entire amount of rest in the prone posture which her symptoms required. This position always relieved her, but a decided impression was not made upon the swollen throbbing ovary until the application of the leeches. Having continued to hear of her for nearly a year since she left the hospital as being in good health, there is reason to hope that the cure is permanent.

ON FRACTURE OF THE NECK OF THE THIGH-BONE.

By JOHN LIZARS, ESQ., F.R.C.S.E.

Late Professor of Surgery to the Royal College of Surgeons, and Senior Operating Surgeon to the Royal Infirmary.

I heve selected fracture of the neck of the thigh bone for my first contribution to the *Medical Times*, and this as the diagnosis is, to my mind, very far from being sufficiently understood, either by those holding the responsible situations of operative surgeons in hospitals, or by clinical professors.

In the majority of cases the diagnosis is simple,—The shortening of the limb, the eversion of the toes, *the flattening of the natis*, and the pain at the joint, especially when the thigh bone is rotated, at once indicate the nature of the accident, which generally occurs after fifty years of age. But in a very considerable number of individuals, there is no shortening of the limb, for one or more days, nay weeks, or even months, after the occurrence of the accident; and, in such cases, when the fracture has been overlooked or neglected, the shortening becomes so great, that inversion, instead of eversion of the foot and toes, takes place, and the ignorant and inexperienced surgeon pronounces the case to be dislocation of the head of the thigh bone on the dorsum of the os ilium, and the unfortunate sufferer is tortured with lacs and pulleys.

The first deceptive case of this description which I witnessed occurred many years ago, under the care of the late John Bell. The case made a strong impression on my mind, in consequence of having had soon afterwards an opportunity of ascertaining the precise nature of the injury by a *post-mortem* examination. The preparation I deposited in my Museum, and it illustrates fracture of the neck of the thigh bone within the fibrous capsule, without union. Since that time, I have seen several patients under similar disfiguration of the limb, consequent on fracture of the neck of the thigh bone.

A well-marked case occurred within these four years. A gentleman, about forty-five years of age, while travelling, fell from a height of three or four feet, and lighted on his hip. He was seen by an intelligent surgeon an hour after the accident, who examined the hip-joint with great care, but could detect no deviation from the normal condition. The injured limb, after the most accurate measurement, was no shorter than the sound one, and when placed straight by its fellow, which could be easily done, there was no turning in of the toes. Six weeks after the accident had occurred, the patient could sit on a sofa, and walk, with the aid of crutches, about his room; and, while doing so, he could place the injured limb alongside the other, without any shortening or inversion of the toes, and when in this position, he could raise his leg and thigh to a considerable height, with ease and freedom.

In a few days after this the limb became disfigured, when, I understand, the patient consulted an hospital surgeon, who considered the injury to be dislocation of the head of the thigh bone on the dorsum of the os ilium; and, if he really thought so, he must have tortured the ill-fated gentleman with lacs and pulleys; but for what length of time I know not.

I was consulted in this case, within a few days subsequent to the failure of the means resorted to, and, after inquiring into the history of the accident, and carefully examining the hip-joint and limb, I stated to the patient, that if his account was correct, I suspected that he had sustained fracture of the neck of the thigh bone. The appearances of the limb were as follows:—great shortening of the limb, with marked retraction of the heel, the toes crossing the sound foot over the tarsus; *flattening of the hip-joint*; extensive mobility of the limb, even through the efforts alone of the patient, and with marked abduction. Without any assistance he could perform flexion, extension, and abduction, in a free manner, and to a full extent.

A case, parallel in many respects to the last, presented itself to me about two years ago:—A lady, about fifty-five years of age, in attempting to descend from the step of the door of a first-class railway carriage, fell down. When carried home, her ordinary medical attendant, a very superior surgeon, was called, and, as he could see nothing commensurate with the pain and lameness, he sent for a surgeon of great reputation, attached to one of the largest hospitals in a metropolitan city. After the most careful examination they could discover no fracture, and were satisfied at the end of three months' attendance on the case, that none existed, at which period, the lady set out for Edinburgh. On her arrival here I was consulted, and found unequivocal marks of fracture of the neck of the thigh bone; the limb being shorter, the toes everted, and *the hip flattened*. The reason for the toes in this case not being inverted was, I presume, that the periosteum and fibrous capsule had not been torn so as to allow such a separation of the head of the thigh bone from its shaft, as occurred in the case referred to of Mr. John Bell and others yet to be detailed.

When I was officiating as surgeon of the Infirmary in this city, my clerk or house-surgeon, Dr. William Home, one of the most talented surgeons of the day, now staff-surgeon in the army, remarked to me one day (after I had made some clinical observations to the students, respecting a man whom I had dismissed cured of fracture of the neck of the thigh bone, with little or no shortening of the limb,) that he was doubtful, if fracture had existed in some of the cases I had treated as such, and that he would esteem it a favour, if I would allow the next patient who came in, with supposed fracture of the neck of this bone, to lie in bed without a splint. To this proposal I assented. Not many days elapsed before a man was admitted into the hospital with injury of hip joint, which Dr. Home considered merely a bruise, while I pronounced it fracture of the neck of the os femoris. The man was about fifty-five years of age,—had fallen from a height of not more than 3 ft., and lighted on his hip. There was no shortening of the limb, and no eversion of the toes, but slight *flattening of the natis*,—an appearance which I consider, along with other symptoms, strongly characterises the nature of this accident. He felt little or no pain in moving the limb, and there was no crepitus. The man was laid in bed on his back without any splint, and the joint fomented. The limb was examined daily by Dr. Home and myself, and on the 8th day we perceived a slight shortening, with the heel more drawn up than the toes. Dr. Home was then convinced, that fracture of the neck of this bone existed, and applied the long splint of Desault. In this patient a tolerable cure was effected.

I have met with three cases, where this fracture simulated morbus coxarius, viz., flattened natis, sinuses extending down

the thigh, shortened limb, with inversion of the foot and toes. On dissection, the head of the os femoris was in a state of necrosis, and far apart from the neck and trochanters. The patients were upwards of fifty years of age: —in one, the fracture was overlooked; in another, it had been mistaken for a bruise; and in the third, for dislocation on the dorsum of the os ilium; in which last, the patient had been tortured with lacs and pulleys by an hospital surgeon.

In Part VI. of my Anatomical Plates, 1st edition, p. 157 of the descriptive letter-press, I pointed out to the Profession, that fracture of the neck of the thigh bone is liable to be mistaken for dislocation of the head of the os femoris on the dorsum of the os ilium. I remarked, that "the powerful extensors drag the trochanter major upon the dorsum of the os ilium, and the gluteus medius pulls it forward, or to the pubic region, until the limb assumes the same appearance, as in luxation on the dorsum of the os ilium."

In my work on Practical Surgery, 2nd edition, p. 128, I state, "the neck of the thigh bone is often fractured, and in many there is no alteration of the limb until some days after the accident, and if neglected, the toes become ultimately inverted."

I am of opinion, that in all cases of injury of the hip-joint, if there is *flattening of the natis*, and especially if the individual be upwards of forty years of age, we ought to look for fracture of the neck of the thigh bone, and apply Desault's long wooden splint, and retain it for six or eight weeks, if the skin over the sacrum remains sound, and the health of the patient will bear it. I deposited in my museum a preparation of ossific union within the fibrous capsule, which occurred in a man upwards of sixty years of age, and I am confident that I have succeeded in uniting this fracture in several patients. But, however strong and neat the junction may be, still the length of the limb will be reduced to a trifling degree; the shortening proceeding unavoidably from interstitial absorption, and in consequence of the angle being changed between the shaft and neck of the bone, from the obtuse to the right, or even the acute angle.

Charlotte-square, Edinburgh, 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

FUNGUS OF THE TESTICLE.

THE morbid changes in the testicle, which, first producing swelling of the gland, eventually proceed to ulceration of the scrotum, and the protrusion of the tubuli seminiferi in the form of a soft granulating fungus, have been so accurately described by Mr. Lawrence, above forty years ago, that nothing further of importance has been added to the subject. The commencement of the disease, assigned generally to a blow, is very frequently, perhaps always, associated with the deposit of tuberculous matter, which, infiltrated amongst the tubules, acts as a source of local irritation, and produces inflammatory swelling. The abscess which ensues should be left to burst, and should not be punctured, unless, indeed, as is rarely the case, it excites greater pain than the patient can bear; as a rule, these abscesses do far better when allowed to pursue their own course, than when treated surgically.

After the discharge of any morbid deposit, the inflammation ceases, and the protruding fungus slowly recedes, unless the change of structure has been so considerable as to convert the fungus into a firm fibrous mass. Pressure in general aids the return of the protrusion, but from various causes it may be necessary to shave it off with the knife. The scrotum adherent to the remains of the gland then cicatrises over the wound. This latter mode of treatment is founded upon the belief, that the testicle is permanently destroyed as a secreting organ, after the full protrusion of the fungus. Perhaps after the giving way of the tunica albuginea, there remains but little chance of its returning to a healthy state.

From some recent observations, Mr. Syme has arrived at a different conclusion to that heretofore entertained of the capability of the testicle in these cases to return to its natural state, and to resume its usual functions. "When," he observes, "the fungous growth is divided longitudinally, that is, from the base towards the circumference, it may seem to consist of two textures distinguished by their colour and arrangement. One is brown, and disposed in straight lines, radiating from the base, where they are nearly or quite close together, towards the circumference, where they are more or less apart, according to the size of the excrescence. The other is white and granular, lying in the spaces which are afforded by the diverging rays. The former is composed of tubuli seminiferi, altered in situation, but not in structure; while the latter is simply organisable lymph that has been effused into the interstices." Upon this opinion, he recommends another operation, which, though more tedious than that recommended by Mr. Lawrence, is stated to have the advantage of preserving the glandular substance of the testis. The hard ring of integument round the fungus being removed, a longitudinal incision is made through the scrotum, which is separated from the adherent parts below, and then united by suture over the fungus. The results are stated to be satisfactory.

As it is obvious that the preservation of the organ in an efficient state is an object of very great importance, it becomes incumbent upon all to examine the accuracy of the observations upon which Mr. Syme founds his opinion, and to draw as much as possible further information from other instances of the same disease. It is stated that, under the microscope, the tubuli show no signs of change of structure. That assertion, unless coupled with another, saying that the tubuli are unaltered in number, in the proportion of their constituents and in their relation to surrounding vessels, is of little value. Let us examine, under the microscope, a portion of the muscular substance of a heart affected with fatty degeneration, which has proved fatal to the patient; it rarely happens but that we can find portions of muscular fibre so healthy that they might be selected as specimens for demonstration; yet, who would infer from hence that the heart were healthy? The question now before us, with reference to the possibility of the restoration to a healthy state of the testicle affected with protrusion of the glandular substance, is one to be determined, partly by such evidence as can be relied upon from the patient himself, and partly by the result of accurate and repeated examinations in instances where the fungus has been removed.

Joseph M——, aged 34, a healthy looking man, in the Gloucestershire police force, unmarried, states that, eighteen months ago, he suffered from an attack of acute pleurisy, for which he was bled four times, with great relief to his symptoms. Upon his recovery, the left testicle began to enlarge slowly and without pain; an abscess formed, which was lanced; the opening healed; but, about two months afterwards, there protruded from the cicatrix (which gave way) a vascular bleeding fungus. About five weeks ago, the right testicle enlarged slowly, and also without pain. He never had any venereal disease. Admitted into the hospital, under Mr. Lawrence, May 27, 1850.

There is adhesion of the scrotum to the left testicle, with an ulcerated opening and the protrusion of a solid fungous mass. The tunica vaginalis of the right side is distended with fluid, and the right testicle is enlarged and hardened.

To rest in bed, a poultice to be applied to the fungous mass.

May 31.—The fluid in the right tunica vaginalis was evacuated by the trochar.

June 1.—The fungous protrusion of the left testicle, being unaltered in size, was shaved off by a scalpel.

Examination of the Morbid Parts.—A thin layer of granulations covered a firm white fibrous mass, in which could be traced with some difficulty the remains of the tubuli seminiferi, much fewer in number than natural, soft, easily broken, and almost as pale as the surrounding structures. Under the microscope the white matter proved to be recently-formed fibrous tissue; it composed by far the greater part of the protruding mass. The tubuli were so soft that they broke under the most careful dissection. The epithelial cells were here and there arranged in their normal state; but were mostly indistinct, and mixed with a quantity of amorphous granular matter. The whole glandular structure appeared in a condition of advanced atrophy.

The wound of the scrotum healed readily, and, under

proper treatment, the opposite testicle is recovering its normal size and condition.

About a year ago I examined the testicle of a gentleman who had suffered from this disease; the protruding fungus had retired by the application of pressure; the epididymis remained hard during life. The vas deferens was hard, and adherent to surrounding parts; the canal was patent, but much smaller than natural, and mercury forced into it caused rupture of the coats; the tubuli seminiferi were very few in number, paler than natural, and intermixed with white fibrous tissue; the epithelium appeared unchanged under the microscope; but there was no trace of secretion in the tubes, as is usually the case when the canal of the vas deferens is simply obstructed or narrowed.

September 29, 1846.—I injected and examined a testicle which had been removed for this fungous protrusion of the tubules; minute injection flowed readily into every part, and coloured the external layer of granulations; the spermatic chord was thickened; the vas deferens and the epididymis were unchanged in structure, but full two-thirds of the glandular substance was converted into a firm white mass, in which scarce a trace of tubuli seminiferi could be found: the fungus had made its way as usual through an opening in the tunica albuginea and the adherent scrotum.

I apprehend, that in these three cases the secreting power of the testicle was permanently destroyed; and no operation, undertaken with the view of preserving the organ, would have been followed by any good result.

TETANUS.

The period at which tetanus may show itself after the receipt of a wound is uncertain, but the disease, when once established, generally proves fatal about the fourth day. Instances, however, are upon record, in which death did not ensue until the eighth day, although, as a rule, the slower the progress of the disease the better is the patient's chance of recovery. The following case is interesting in showing, that this affection may manifest itself after an accident so gradually, that the patient shall be wholly unaware of his danger, and that it may prove fatal at a much later period than that usually assigned; the latter stages alone running their course with rapidity. For the particulars of this case I am indebted to Mr. A. Kingdon, one of the House-Surgeons to the hospital.

Daniel N——, aged 44, a square-shouldered man, of short stature, presented himself at the Surgery of St. Bartholomew's Hospital, complaining of stiffness of the jaws and occasional difficulty of swallowing. His gait was awkward and unsteady; his manner odd; and when he attempted to speak his features became distorted. It was with some difficulty that he could separate his jaws sufficiently wide to admit a finger. When questioned, he denied having received, to the best of his memory, any injury, however slight, in any part of his body. He was referred to Dr. Jeaffreson, who, after many minute inquiries, made out that, a fortnight ago he had scratched his heel, whilst walking down stairs without boots. The wound healed, but a small abscess formed, which was opened by a minute lancet puncture. Four days after the accident, he experienced a "stitch" in the left side, and became troubled with a slight cough, which has continued to the present time. At the same time he felt uneasy sensations in his ears, accompanied with stiffness in moving his jaws; the last symptom, however, was not permanent. Four days before his admission into the hospital, he spent the evening with some companions at a public-house, and found great difficulty in swallowing. From that time, the difficulty in swallowing has increased. He was admitted under the care of Mr. Lawrence.

May 18, 1850, half-past 9, p.m.—He walked to the hospital, and seemed wholly unconscious of his dangerous state. The head was drawn back; the sterno-mastoid muscles were prominent. The face was distorted into a fixed hideous grin; there was a puckering of the integuments at the angle of the eyes; the jaws were firmly locked; pulse 92; soft and regular; the bowels have been open three times during the day. There was a slight wound, without redness, heat, or swelling, through the integuments of the left heel.

Twelve leeches to be immediately applied to the nape of the neck.

Half a grain of acetate of morphia to be taken every night.

May 19.—After the application of the leeches he was able to open his mouth sufficiently wide to put out his tongue, and he expressed himself much relieved; he slept well, but towards morning the jaws again became fixed, and the muscles of the back were more rigid than before.

The aspect of the face is the same; he says that he feels no pain, but has an uneasy sense of stiffness at the back of the neck. The whole head is hot, and he complains of great thirst; but he cannot drink for fear of choking.

Pulse 88, and soft.

A blister to be applied over the cervical and upper dorsal spines; ice to be applied in a bag to the head.

4 p.m.—The bowels have not been relieved, nor has he passed any water.

One minim of croton oil to be taken immediately, and to be repeated every four hours until the effect be produced.

5 p.m.—He was seized with the first spasm; the eyes were closed; the face distorted; the arms were slightly flexed and rigid; the hands were clenched; every muscle of the body was convulsed; lips blue; pulse scarcely perceptible, and intermittent. Cold water was dashed upon his chest, and the muscles became relaxed; the respiration deeper and more regular, and consciousness returned.

Half a drachm of laudanum immediately.

12 p.m.—Has had four convulsions since the last report; jaws firmly fixed; bowels still confined.

Enema. Two grains of opium the last thing at night.

May 20, 8 a.m.—Has had four hours' sleep, but upon awaking the spasms returned; feels as if bruised all over; complains of pain in the ears; general aspect unchanged; pulse 84, and regular; bowels not open.

A minim of croton oil immediately.

At 9 a.m. and 3 p.m. he had violent attacks of spasm. In the intervals the muscles of the extremities are relaxed, but the abdominal muscles, and those of the back of the neck, remain permanently rigid. He cannot bear making an attempt to swallow; bowels not open; pulse 86, and soft.

Two minims of croton oil hourly, until the bowels act. A drachm of extract of colocynth to be given as an enema after the third dose of the croton oil.

Half a grain of acetate of morphia and a drachm of tincture of hyoscyamus to be given occasionally.

Half-past 11 p.m.—He has had six convulsive attacks since the last report. After the administration of eight minims of croton oil, followed by the enema, the bowels were relieved of two copious, solid, and healthy motions. After each of the three last attacks, he has been able to open his jaws, and swallow with comparative ease for a few minutes, but the former condition soon returns.

May 21.—He slept for nearly four hours, but has had several fits of spasm since the morning. At each attack the bladder discharges its contents; the eye-lids remain open, and the eyes are seen to roll wildly, but in harmony, and towards the end of the fit to be fixed in a converging squint, the pupils being widely dilated. He then becomes easier, and can for a short time open his mouth sufficiently wide to spit out the phlegm, which annoys him; pulse 104, and without power.

May 22.—Has had several fits in close succession; pulse 156, as far as could be counted; he was able to swallow some broth, but he did not rally; the extremities became cold, the circulation failed, and he died at five minutes before twelve p.m., having passed the last three hours with irregular twitchings of various muscles of the body.

The body was carefully examined by Mr. Kingdon; the whole brain and spinal chord, with the membranes, were removed, and there was found no trace of morbid change in any part. The other viscera were also healthy; for a short distance the mucous membrane of the small intestine was slightly congested with blood; but this most probably resulted from the actions of some of the medicine taken during life. The colour was faint, and would have scarce been noticed in an ordinary *post-mortem* examination.

It should be remarked, that in the case here related, the patient had entirely forgotten the slight accident to which the occurrence of the disease was attributable. The early symptoms, namely, sharp pain in the side, uneasiness about the ears, and stiffness of the muscles of the neck and jaws, were allowed to pass without notice; ten days elapsed, during which, though in occasional pain, he pursued his usual habits and avocation. Upon applying at the hospital, after an evening passed in a public-house, with the symptoms of tetanus strongly marked, he was yet unaware of his danger. Convulsions soon came on, the paroxysms became more frequent and more violent, the pulse increased in the quick-

ness of its beats as it lost power, and he died worn out the sixteenth day from the occurrence of the first symptom. The *post-mortem* examination revealed no morbid change of structure whatever; the brain and spinal chord were remarkably white and firm; there was no increase of vascularity, no deposits of cartilage or of bone in the membranes of the chord; the slight redness in the mucous membrane of the intestines could not be regarded as connected with any of the phenomena of the disease. Hence we must infer that, up to the present time, our means of detecting the morbid conditions to which this disease is referrible are yet insufficient; and that the structural changes, observed both in the nervous centres and in other organs, (in which latter situation they are regarded as predisposing causes,) are accidents, which may or may not exist even in those cases where the duration of the disease has been greater than usual. If the morbid anatomy of tetanus is unsatisfactory, equally so is its treatment. Temporary benefit is obtained by the local abstraction of blood from the nape of the neck, by administering narcotics to procure ease, and strong purgatives to evacuate the alimentary canal. Blistering the spine may be useful in some cases. Cold affusions were tried upon this patient, having been thought beneficial in some cases under treatment two years ago; their employment, however, is not unattended with danger. Chloroform has been administered upon several occasions at the hospital, and with the effect of giving temporary relief; but the conclusion to which we are driven is, that the train of morbid phenomena termed tetanus, depend upon causes with which we are unacquainted, and are not under certain control by any known remedies which we possess. H. C.

GUY'S HOSPITAL.

By Dr. CHARLES KIDD.

FRACTURES OF THE RIBS.

On Friday last, Mr. Hilton delivered an interesting clinical lecture, on the very simple, but very practical subject—Fracture of the Ribs. Some recent accidents of this character, at Epsom races and elsewhere, have afforded opportunities for testing a new plan of treatment, by long straps of plaster over one side of the chest, now adopted very generally in this hospital. The ribs are broken perhaps as often as any bones in the body, except possibly the radius or clavicle. In broken-down or scrofulous constitutions the accident is very serious; and, when complicated with extensive emphysema, or hæmorrhage into the chest, very often proves fatal. The first case alluded to was that of a strong, healthy lighterman in the river, taken into hospital May 28th,—Thomas Browne, aged 55. During a swell of the stream from the passing of one of the penny boats, he was precipitated off the ordinary plank on the edge of his coal barge. Received into hospital, he complained of all the ordinary symptoms of broken rib in its simplest state, and formed a contrast to more serious cases we have to speak of. He had very intense pain of the side, more particularly on taking a deep inspiration. Admitted into "Cornelius" ward, the fifth, sixth, and seventh ribs were found broken. The side was strapped by passing large strips of adhesive plaster round the top of the chest, down over the site of the injury to about midway between the last rib and crest of the ilium; he was ordered a mixture, with hyoscyamus and tartrate of antimony, and strict rest (not a word to be spoken) enjoined. This circumstance Mr. Hilton dwells on as essentially necessary in these cases;—indeed, with absolute quiet, the strapping carefully managed, and the tartrate of antimony sedulously attended to—especially if perspiration break out—the rapidity with which these cases do well is quite wonderful.

29th.—The patient to-day is much the same; symptoms not much relieved. Ordered to continue the antimony and hyoscyamus, and to go on exactly as before.

June 1st to 7th.—Went through all the familiar changes of this accident, and was so well on the 7th as to discontinue his medicines; in fact, he is quite well to-day.

10th.—Chest strapped again to-day. Left the hospital.

Thus, in, we may say, twelve days from the accident, this man leaves the hospital. It would be expecting too much, however, to think that perfect bony union had been established. The ribs, it need scarcely be said, are very vascular; the reparative power proportionably active; the man, therefore, having been cautioned what to do, was discharged. He is now perfectly well, and perfect bony union all but completed.

Case 2.—M. A. H. This case is more serious. The woman was in the habit of drinking; and in a domestic feud was beaten by her husband with a poker. On applying at the hospital she appeared in a most miserable state; very sick, with pain in the side; cough and usual signs of fractured ribs. On examination, the fifth, sixth, and seventh ribs, as in the previous case, were all found broken, with very extensive emphysema all up the side. The strips of plaster were carried from behind forward, over the chest, as before, the mixture, with tartrate of antimony and hyoscyamus also exhibited systematically, and strict rest enjoined.

26th.—Feels much better to-day; quite different, in fact, since the plaster was put on.

27th.—Still improving; emphysema manifestly disappearing; pulse 84.

28th.—Same report.

29th.—Left the hospital to-day quite another person.

Case 3.— — Lewis, aged 47, is a case of fractured rib with laceration of the lung, bringing on pneumonia. This man, standing with a crowd at Epsom, at the races, was precipitated a distance of sixteen feet to the ground. On being taken up he was found to have broken the eighth and ninth ribs; crepitation of the two ends of the bone was quite apparent, as well as the other signs of fracture. He was put under treatment much in the same manner as in the two former cases; straps of plaster, 2½ inches broad, were put round the chest, and antimony ordered.

13th.—He was hot and very feverish; restless. To continue the antimony.

14th.—Worse to-day. Evident symptoms of pneumonia; pain in chest; rusty-coloured sputa. He was ordered calomel, in addition to his other medicines.

16th.—The report of the last two days more unfavourable. He is exceedingly ill to-day; quite delirious. The calomel had opened the bowels; his voice is whispering and weak; expectoration still rust-coloured; pulse 90; evidently in great danger.

19th.—Better; pneumonia subdued.

21th.—So much improved as to sit up. Was ordered to day cascarilla and tinct. cinchonæ, with additional nourishment.

June 13th.—Has been improving steadily up to this date. Straps renewed over the chest, and he left hospital.

A fourth case of fracture of the ribs, with rupture of the liver, was spoken of, to which we may have occasion again to allude; the entire forming a group of cases, as remarked by Mr. Hilton, of no little importance in a strictly practical point of view. In one case we find the lung seriously injured, without emphysema, attended with high fever and very severe pneumonia; the man's life despaired of for several days. In another, the lung or pleura evidently pierced by a spicula of broken rib, with symptoms of a much less serious character. The former case, in a medico-legal point of view, is very evidently one of considerable importance. A cart-wheel will go over the abdomen, and crush the kidneys, and leave little mark; a musket-ball will glance from the loins, and do the same. Here we have something analogous in the chest. A man may be taken up with several unimportant bruises on other parts of the body, to which attention is more immediately attracted. There may be no bruise apparently on the chest, no emphysema, and little pain; yet his lungs may be irreparably destroyed. Symptoms, of course, will show themselves, and the stethoscope clear up everything when it is too late, to bleed or use active treatment. The practitioner should be prepared for such things.

In the diagnosis of fracture of the rib we will seldom go astray, if we keep one or two points in view. The detection of crepitus, by placing the hand over the side; the production of pain and crepitus on the patient coughing; the sharp, pricking pain in the site of the injury, when a branch of the intercostal nerve gets crushed between the ends of the broken bone, are, of course, familiar to the reader. In addition to these, he will do well to remember that, in the vast majority of cases, the fifth, sixth, seventh, or eighth rib, or all these together, are those most commonly broken. This he will easily understand when he recollects, that the upper ribs are rarely broken, because the clavicle, and, I would say, the soft, cushiony head of the humerus, defend them in front; the scapula and muscles about its upper angles, behind. The

lower ribs escape because they are so moveable and short. Then, again, the ribs are often broken on their most convex point; this is a matter of some little interest in the examining of a patient; not to distress him, we should go to this point at once. Crepitus, too, is more easily detected here; when the parts about the deep muscles of the back are examined it becomes quite obscure.

Muscular adjustment often (as in pugilists and prize-fighters) prevents fracture of the ribs, and explains, perhaps, why the ribs should be most frequently broken at their convex or weakest point. A force almost incredible may be urged against the chest, if the muscles prepare it for receiving the shock; if taken unawares,—as we might say, "off its guard,"—half the force will as surely break the bones of the chest.

Difference of pain, in cases of fracture of the ribs, Mr. Hilton explains by saying, in some cases the intercostal nerve is scratched or crushed between the jagged ends of the broken rib. In fracture of the neck of the humerus, the same thing occurs—very excessive pain indeed—from the circumflex nerve getting into the fracture. In obscure cases of injury of the ribs, Mr. Hilton wisely advises to give the patient the benefit of the doubt, and treat the case as if fracture really existed. The hand "diffusedly" over the chest; the ear, or in some cases the stethoscope, will almost always detect crepitus where it exists, even ever so obscurely. In the treatment of these cases, he disapproves very much of bandages: the plan of allowing one side of the chest to compensate the want of motion of the opposite being far preferable.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

LITHOTOMY.

On Saturday last, Mr. Solly performed the operation for lithotomy in this hospital, on a young man who came up from the country with stone of the bladder, and attended as an out-patient, with all the usual symptoms of this formidable disease. The intensity of the patient's sufferings was easily explained by the large size and mulberry roughness of the calculus. The operation was the ordinary lateral operation, and performed by Mr. Solly with his usual self-possession and skill. Some little difficulty presented itself in removing the calculus, at once explained by its large size. Chloroform was not used; the young man going through his sufferings with unusual fortitude. On the completion of the operation, the poor fellow thanked Mr. Solly in the warmest manner, and Mr. Green, who kindly assisted in holding the staff. The difficulty seemed to consist in the sacculated condition of the bladder at the back of the prostate, the stone getting into one of the cells so formed, and sticking pretty fast there. The man is doing well.

Amongst the lesser operations and accidents at present in this fine Institution may be particularised, perhaps, two cases of amputations, after the flap method—doing well. One, a case of Mr. Solly's, which has appeared in the public prints, and has excited no little pity—a man who had both bones of his foot broken and left hanging by a mere piece of skin, having got it entangled in a coil of rope in one of the river steamers. The poor fellow is doing well, but it is to be feared will be for a long time unfit for any occupation. The other cases seems to have the face of the stump well covered over with a sound flap, and is also doing well. The operation for entropium also was performed on Saturday. On going round the wards also with Mr. Green, a suspicious-looking swelling at the side of the rectum was opened, which gave issue to a large quantity of pus, matters possibly of minor surgery; but those with which the everyday practitioner is more interested than with things of mere abstract novelty, and about which we would wish occasionally to refresh his memory.

CHARING-CROSS HOSPITAL.

By W. HAMILTON, Esq., M.R.C.S.,
House-Surgeon to the Hospital.

SEVERE CASE OF EMPHYSEMA.

A boy aged fourteen years was dragging a truck along St. Martin's-lane, and at the moment of his passing a brewer's dray, the linch-pin of the truck wheel came out, and the handle striking him, threw him with considerable violence against the wheel of the dray; he was completely stunned by the blow, which was received across the upper part of the chest. Being brought at once to the hospital and examined, no fractured ribs could be detected; but there was great difficulty of breathing. Half an hour after admittance, viz., 10 a.m., the face and neck were considerably swollen, elastic to the touch, and presented the peculiar crackling of emphysema; the breathing was exceedingly hurried and difficult; pulse small and weak: in fact, he appeared *in articulo mortis*. Small quantities of wine were occasionally administered, and mustard cataplasms applied to the extremities.

At half-past one, a.m., Mr. Avery saw him; the emphysema had now extended downwards over the chest, forming two large bluish swellings on each side of the sternum, reaching backwards to the spine; the eyes were closed, and, upon raising the lids, the conjunctivæ were found perfectly red from effused blood; the pulse was somewhat more distinct; complains much of the great pain in the chest, particularly when touched. Mr. Avery ordered venesection to four ounces, after which the pulse became a little more full, and the patient felt somewhat relieved of the pain. Ordered also an aperient enema, and a woollen bandage to be applied lightly round the chest, and to take a febrifuge mixture every three hours.

8 p.m., pulse 120; breathing more oppressed; was again bled to four ounces, which afforded considerable relief; bowels well acted on by the enema.

13th (next day.)—A decided improvement has taken place; pulse 110; breathing easier, but emphysema much the same.

14th (vespere).—Not so well; there is more dyspnœa; pulse 120; ordered two cathartic pills, and to repeat the bleeding to four ounces.

15th.—Very much better; pulse 105; swelling is diminishing; is enabled to open the lids to-day for the first time.

From this day, I find, by my colleague Mr. Jessop's case-book, he continued to recover fast; the emphysema gradually disappearing; the breathing easy, tongue clean, &c. He was discharged well on May 4th.

We have stated, that there was no fracture of the ribs discernible on his admission; in fact, after the first hour, the emphysema was so great, it was impossible to attempt an examination. When this had diminished, however, about the fourth day, Mr. Avery carefully examined the chest, but no fracture could be detected; it ought also to have been mentioned, that there was no cough or expectoration. Where, then, did the air come from which had so extensively infiltrated the cellular tissue? Mr. Avery is inclined to think, that one of the larger bronchi was ruptured, and hence the escape of air. A similar case to this has been recorded by Dr. O'Brien, where extensive emphysema followed a blow on the chest; the patient died, and the larynx was found ruptured.

ULCER OF LEG TREATED BY THE INTERNAL USE OF TURPENTINE.

The following case has been recorded as illustrating, in a very marked manner, the observations made by Mr. Hancock, about five years ago, on the great utility of turpentine in some forms of ulcer of the legs, and especially, as in this instance, in those cases depending on debility, with want of action in the system altogether, where the circulation is languid, the wound sluggish, with its surface smooth, and without granulations, and of a greenish, foul appearance.

The wound in this case was so extensive, and her health suffered so severely from it, that the advisability of removing the limb was discussed.

E.B., aged 20, living at Chelsea, unmarried; by occupation a laundress; her general health delicate; has never menstruated; but, at the monthly periods, used to vomit and cough up blood. Her employment requires a good deal of standing. About a year and a half ago, the leg (left) first became affected, in consequence of having grazed the skin just above the ankle; the wound did not heal, but increased in size. She applied poultices, went to a surgeon, who tried various remedies, but the ulcer continued to enlarge; and at the time of her admission, March 12, 1850, it was nearly five inches broad, and had extended completely round the leg, with the exception of a very narrow portion behind; its surface was smooth, and without granulations, the edges

rounded and callous, and the pain excessive. Her health had suffered extremely; so weak that she had not left her bed for two months; has wasted away, lost appetite, and is subjected to night sweats, with a troublesome cough.

Under these circumstances, Mr. Hancock, under whose care she was placed, commenced giving her the cod-liver oil; but it caused so much nausea it had to be discontinued; and on the second day the turpentine mixture was ordered as follows:—Sp. terebinth., ʒvi.; pulv. acaciæ, ʒvi.; aq. menth. pip. ft., mist. ℥viii., cap. ʒi. ter die. At the same time she had a generous diet, with a daily allowance of wine. Linseed-meal poultices were applied to the leg for the first day or two; but afterwards, throughout the case, water-dressing, and the leg bandaged up to the knee.

Under this treatment she continued to improve daily, the wound became covered with small regular granulations, secreting good healthy pus. Her appetite improved, the menses returned, and with it ceased the expectoration of blood. She was discharged, with the leg quite healed, June 15, just three months after her admission.

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THE MEDICAL TIMES.

SATURDAY, JULY 6.

THE PAST AND FUTURE OF MEDICINE.

The Romans painted their god Janus with two faces: one old, worn, and shattered, with time-marks deeply graven on it, as by the passage of the countless years towards whose retreating forms it ever looks; the other youthful, unwrinkled, radiant, receiving on its transcendent outline the beautiful Aurora, which marks the advent of the incomparable dawn. The one face is the type of Experience, stern, rigid, unanticipative, unhoping; looking back on the dreary months of stormy winter, and encrusted by the bitter and ungenial frost of white December. The other countenance is the bright image of Youth and Hope, gazing over the glad meadows on which already buds the thorn, breathing the intoxicating odours of Favonian gales, and burning for the full possession of those countless gifts with which benignant Nature crowns the lap of May.

This beautiful device, invented by a people whom it is the fashion to call unpoetical, can find its application in many ways. Yet, in no way can it be more justly applied than as an image of that wonderful profession of Medicine, whose traditionary roots strike deep into the antique soils of many thousand years, while its latest shoots are nourished by the springs which gushed but yesterday. For this is a science fed both by the past and the present; good sap yet springs from the dark caverns which centuries have closed in, and finds its maturescence in the light and air which pour from out the urns the present day has filled.

And, as the face of the Roman god gazing over the sterile fields of the past, is filled with an unutterable sadness from the aspect of the decay and death of Nature; so the spirit of Medicine, gazing back through the vista of centuries, fixes its pitying look on the unspeakable physical sufferings of the human race. Before that glance roll away, as on a scroll, the tribe of innumerable diseases—fierce fevers; unsparing plagues; the long and various array of wasting epidemics. Sadly and reluctantly, a despairing witness of the might of evils it cannot effectually destroy, it imprints, year by year, and century by century, its melancholy tale.

But, if the withered image of the sad Experience may truly represent the difficulties, trials, and prostrations of our art; the image gazing forward to the spring may aptly typify the triumphs it has already won, and the flush of the coming victories it is promised. For the time has not yet been in the history of medicine which can be compared to the present, in the hope which fills the minds of all, that we are arrived at an era of extraordinary progress. Our improved methods of investigation, our profound chemistry, our searching physiology, the rapidly-spreading knowledge of the microscope, opening before us the recesses of minutest things, daily throws to the surface fresh crops of precious ore, which the united labours of numerous observers test and try. The logical and severe method of investigation for which we are indebted to the French school, the minute inquiries into texture and development for which we mainly thank the German, have their ardent followers both in this country and in America. Meanwhile, the universal knowledge of modern languages renders the labours of each observer as familiar to all nations as if, as of old, there were one common language, in which the learned of all lands spoke. At no time in the history of medicine have there been so many and such skilful workmen in the field. The result must inevitably be, that our science, in a few short years, will have attained a growth, that its laws will have assumed a certainty, and its professors be able to wield a power, which shall justify the genealogy old Homer sang, when he made the curers of the body the sons of gods.

Nor can we overlook in this gaze into the future, the cheering prospects which the cultivation of state medicine has opened to us. For it seems not unreasonable to hope, that the physical degradation which has so long pressed on the mass of the people will be lifted off, and that, ere long, the force of many terrible epidemic diseases will be effectually broken. For this, we have undoubtedly to thank advancing medical knowledge, which has lifted the veil which hid the causes of disease.

For ourselves, we rejoice in being an instrument in this beneficent progress. We rejoice to be one of those media of communication which bind up the scattered links of observation, and bear them from one to the other, so that they may be seen and felt of all men. And what we have to do, in thus aiding the progress of medical science, we will do it with our strength; not refusing ever and anon to study the lineaments of the past experience, yet trusting mainly to that bright genius of industry and hope which, through pastures new, and ways untracked before, shall guide our pilgrim footsteps towards that promised land, where unsullied gush the healing springs, which we may pour out for those who seek our aid, bidding them, through the help of Providence, drink and live.

We commence to-day a new series of the *Medical Times*. On this series we shall bestow our utmost strength, collecting from all sources both the rough crags and the hewn stones, and fixing, daguerreotype like, in our faithful columns, the successive phases of our noble art. And thus our hope is, that not only shall we be found, by our own generation, useful in presenting to them every fact which is a step onward, every plan which promises relief to suffering, every suggestion which may preserve health; but that the generations which are to come, may look back on our series as being the fit representative of the active, earnest, and indefatigable spirit which characterises the present period of the healing art.

SIR CHARLES HASTINGS AND SIR ROBERT CARSWELL.

It gives us great pleasure to observe that, in the small band of distinguished men on whom the honour of knighthood was conferred at the levee, on Wednesday last, Her Majesty has been pleased to include two of our most eminent brethren, Dr. (now Sir) Charles Hastings, of Worcester; and Dr. (now Sir) Robert Carswell, Physician to the King of the Belgians.

From the period of his first entrance on his medical career, Dr. Hastings took a prominent station among his professional brethren. Those among us who knew him at Edinburgh, while preparing for the doctorate, which he took at that University in the year 1818, will well remember the high place he assumed at the Medical Society of that city, and on all occasions where there was an opportunity for the display of talents and knowledge; nor will they soon forget the unaffected, animated, and cordial nature of the man, which made him so justly popular with all his youthful friends and acquaintance. It was during the period of his studies at Edinburgh that he entered upon those investigations into the nature and phenomena of inflammation which justly gave him so early a fame, and the results of which he published in the year 1820, in his "Treatise on the Inflammation of the Mucous Membrane of the Lungs." Notwithstanding the progress made in pathological inquiry since that time, Dr. Hastings's views and conclusions still retain their place in the estimation of our best and most recent pathologists.

Immediately after graduation, Dr. Hastings established himself at Worcester, to the infirmary of which city he was appointed physician; and here he has ever since continued to practise over a most extensive field, and with such a degree of general acceptance and regard, both from his lay and his professional friends, as has rarely if ever been exceeded.

At all times, and on all occasions, Dr. Hastings has been the advocate of liberal measures, and has never failed, by his words and writings, and by his personal example, to promote the interests, the honour, and the dignity of his profession; and to discountenance and hold up to merited scorn whatever tended to degrade it or its professors. Nor have his exertions been confined to his own profession. It is mainly through him that the Worcestershire Natural History Society was established, and the splendid Museum erected which now adorns the capital of his native county. It was on the occasion of establishing this Society that Dr. Hastings published his "Illustrations of the Natural History of Worcestershire,"—a very valuable monograph. But the great and characteristic act of Dr. Hastings's life, and that which will most surely transmit his name with honour to posterity, is the formation and establishment of the "Provincial Medical and Surgical Association," of which Society he was unquestionably the Founder, in every sense of that word.

So far back as the year 1828, Dr. Hastings projected a Provincial Medical Journal, under the name of the *Midland Medical and Surgical Reporter;* and, with the aid of several friends, continued to conduct it with much success until the year 1832, when it ceased as a Journal, and became merged in the *Transactions* of the Association, which was founded at Worcester on July 19, of that year. On this occasion Dr. Hastings delivered an address to the members present, explanatory of the plan, principles, and objects of the new Association; and, although the great mover and director of the whole, he contented himself with the humble office of Joint-Secretary, along with Mr. Sheppard. This title he retained until within these few years, when he was raised to the new office of *President of the Council*, purposely created to do him honour. The members had previously requested Dr. Hastings to sit for his portrait, which was presented to Mrs. Hastings in their name. During the last and present year, Dr. Hastings has also been, and still is, *President of the Society.*

Since its formation in 1832, the Provincial Association has held annual meetings at nearly all the principal cities and towns in England, and has published seventeen volumes of Transactions, besides its well known *Journal*, now of many years' standing. Never, on one occasion, has Dr. Hastings been absent from the annual meeting, and never, since the foundation of the Society, has he ceased to be regarded by his brother-members as its moving, and guiding, and ruling spirit; respected, honoured, and beloved as truly, perhaps, as ever any public man was.

Our space will not permit us to enlarge on the special benefits conferred on the provincial medical practitioners by the Society founded by Dr. Hastings; although unfortunately differing with it on certain points, we readily admit that the manifold good produced by it, in a professional, scientific, and social point of view, has been of the greatest and most important kind. And it cannot fail to be extremely gratifying to Sir Charles Hastings and his friends to know that it has been entirely on account of these benefits conferred by him on his professional brethren, and on no private grounds, and through no personal interest, that Her Majesty has been now graciously pleased to confer on him his present dignity, as a mark of her royal approbation, and as a reward for public services of no ordinary kind.

Perhaps for the immediate causes of the honour conferred on Dr. Carswell, we might be pardoned in looking no further than to the fact of his being the confidential physician of the King of the Belgians, the uncle of our own excellent Prince, and the friend of our august Queen. But we should feel that we were doing an injustice to Sir Robert Carswell, especially after what we have just said of Sir Charles Hastings, did we not add, in a few honest sentences, all that the space now left will permit us to say of his deserts. We regard Dr. Carswell as justly entitled to rank with the distinguished names of British Medicine. Previously to the publication of the great work of Rokitanski, the "Pathological Anatomy" of Dr. Carswell was the standard work on the subject, and is yet unrivalled in the accuracy of its descriptions, and in the beauty and truth of its pictorial delineations. This work was the result of no less than eight or ten years devoted to the study of morbid anatomy in the hospitals and dissecting-rooms of Paris. It was solely from the high reputation he had already acquired in this department of science, that Dr. Carswell was appointed Professor of Pathological Anatomy in University College, London; and it was from the additional eminence he had there gained, both as a pathologist and practical physician, that he was selected for his present high office at the Belgian Court, on the retirement of the late excellent Dr. Andrew Combe on account of ill health. We have the means of knowing that, during the ten years that Dr. Carswell has been physician to the King and Queen of the Belgians, he has afforded the utmost satisfaction to his royal patients; and, probably, a stronger proof of this satisfaction could not be given than the fact, that he is now in this country, at the request of the Belgian Queen, on a professional visit to her father, Louis Philippe. We will only further add, that we know Sir Robert Carswell to be as honest and honourable a man as he is a distinguished physician. We conclude in the words of the old minstrel:—

> And so, gode nyght, gode Knyghtis twain!
> Newe honoures eke newe bertue gain
> When brooked of wyghts withouten stain:
> The wode hys werth is in the grain.

ROYAL MEDICO-CHIRURGICAL SOCIETY.

A short time since the members of the profession were gratified at learning, that the Medical Society of London and

the Westminster Medical Society were amalgamated. They also learned, with much satisfaction, there was a prospect that the new Society, in completing its arrangements, would engage apartments or a house, where, in addition to the usual advantages connected with a debating society, possessing an extensive and valuable library, all the advantages derivable from a Medical Club would also be obtained. In some paragraphs which appeared in the columns of this Journal, the plan was advocated, and met with the cordial approbation, not only of the majority of the Fellows of the amalgamated societies, but also of the professsion at large. Unfortunately, pecuniary considerations interfered, and the Council of the new Society have been obliged to content themselves with securing apartments in which the ordinary business of the society can alone be carried on, and all hope of a Medical Club in connexion with it has been abandoned, at least for the present.

Still, however, there remains a chance,—perhaps a mere chance,—that this great desideratum may yet be obtained. The Royal Medical and Chirurgical Society, the *princeps* of our professional debating societies in talents and in means, has recently concluded an engagement with the proprietor of the house in Berners-street, by which the Fellows are put in possession of the whole mansion. The first floor consists of three rooms, two of which are very large and lofty, and might easily be appropriated for reading and coffee-rooms, with the other appurtenances and conveniences required by medical men, at a distance from their homes, or by country practitioners paying a visit to the metropolis. It were almost a needless task to comment on the utility of a Medical Club attached to this, the most important medical society in the empire. The reasons in its favour must present themselves at once to every one; nor can we for a moment conceive that any feasible objection can be offered to the proposition. The Society, without perhaps being wealthy, has still a sufficient income for the purpose. Its hundreds of Fellows, at three guineas a year each, afford an income which will enable the Council to dispense with the unenviable and derogatory commerce of lodging-house keepers! We make this remark, as we have heard it proposed to let this floor, and thus add a few pounds to the Society's yearly income. But think how derogatory would it be to such a scientific institution to increase their funds by so tradesman-like a proceeding. Better by far would it have been to have remained merely the tenants of the ground floor, than to have taken a lease of the house for such a purpose. We sincerely trust that the Fellows will put their veto against such a proposition, should it come before them, and require that arrangements be adopted to provide the accommodations to which we have alluded. The Council may feel assured, that such a measure would increase the number of the Fellows subscribing to the funds of the Institution to a very large extent, especially if certain obnoxious bye-laws be rescinded.

MEMOIRS OF DECEASED EMINENT MEDICAL AND SCIENTIFIC MEN.

There are few men of eminence, especially in the Medical Profession, whose lives will not furnish materials for a narrative from which instruction as well as entertainment may be derived. Many such have done good service to mankind by clearing away the mists of prejudice and error, by adding new facts to the store of knowledge, and by smoothing the path for those who follow in their track; yet it is only by tracing the careers of such men, and by reflecting on the difficulties they had to surmount, that we are enabled fully to appreciate the services rendered by them to Medicine and its collateral sciences. They then become beacons to others, cheering them on their way, and pointing out the quicksands with which truth is surrounded.

It is needless to say, that the most brilliant characters are not always the most useful: there are many exceptions. There have been, and ever will be, humble-minded, plodding, earnest, and much-enduring men, who are scarcely heard of during their lives, beyond a limited circle, or the boundaries of the town in which they reside, and yet are among the most successful cultivators of science.

The provinces, not less than the metropolis, are rich in talented and interesting characters; and it is proposed to give in these pages a series of Memoirs of men who have been eminent in the practice of the healing art, and the sciences immediately connected with it; and we shall endeavour to discharge our task in such a manner as to render those sketches at once accurate, useful, and entertaining.

MEMOIR OF DR. PROUT, F.R.S.

Dr. William Prout was born January 15, 1785, at Horton, in Gloucestershire, a village so retired that it was distant several miles from any high road, and had had neither resident squire nor clergyman for forty years. His parents were in independent circumstances, the family for some generations having resided on their own property.

Until seventeen years of age, William Prout was, in a great measure, self-educated; but then, prompted by a strong craving after knowledge, he placed himself under the tuition of the Rev. Mr. Turner, of Sherston, Wilts. At a later period he entered the academy of the Rev. Dr. Jones, of Redland, near Bristol. By Dr. Jones he was greatly respected, and it was at his recommendation that he commenced the study of medicine at the University of Edinburgh, where he graduated in 1811. From Edinburgh Dr. Prout removed to London, and continued his studies at Guy's and St. Thomas's Hospitals until 1813, when he went to reside in Arundel-street, Strand. In this year he delivered Lectures on Animal Chemistry: the class was very small, but so highly was he already esteemed, that his audience constantly included the late Sir Astley Cooper. In 1814 he commenced practice, having taken a house in Southampton-street, Bloomsbury: another important event of this year was his marriage to the eldest daughter of that eminent scholar, the late Alexander Adam, LL.D., author of the "Roman Antiquities." Dr. Prout's reputation was already considerable, and he was elected, in the same year, a Fellow of the Royal Medical and Chirurgical Society, being admitted on May 10, 1814, in company with Dr. Henry Holland. In 1823 he served the office of Vice-President of the Society.

Three events of interest to the subject of our Memoir have already been mentioned, as characterising the year 1814; but there was yet another,—a visit to Paris, during the short peace previous to Waterloo, when that city boasted of the wonderful collection of choice works of art which had been gleaned by Napoleon and his generals from all the chief continental galleries and cities; a collection matchless in itself, and which can never again be brought together. He was admitted to a private view of this, through the kindness of Baron Denon, the celebrated traveller. We can imagine the delight with which a man of a mind so refined, and so open to the appreciation of the beautiful as that of William Prout,—no mean draftsman himself,—wandered through the noble saloons of the Louvre, whose walls were then crowded with the most glorious examples of the skill of Titian and Velasquez, of Murillo and Rubens; and the rapture with which he gazed on those graceful forms and groups of living marble, which challenged the world to produce their equals, and challenged it in vain! The next four years were devoted to work, hard and unremitting; and an interesting illustration of the esteem in which he was already held is afforded by the flattering manner in which he obtained admission in the Royal Society. By the politeness of Mr. Weld, we were enabled to examine the original proposal paper; this is in the hand-writing of Dr. Marcet, and runs thus:—"William Prout, M.D., of Southampton-street, Bloomsbury, author of several chemical and physiological papers, one of which was printed in the last volume of the Royal Society's Transactions, being desirous of admission into the Royal Society, we, the undersigned, do, from our own personal knowledge,

recommend him as worthy of that honour, and as likely to become a very valuable and useful member.

(Signed)

"Alexander Marcet, "P. M. Roget,
W. H. Wollaston, H. Leigh Thomas,
Henry Warburton, Gilbert Blane,
Charles Kœnig, M. Baillie."

This was suspended December 10, 1818, and the election took place March 11, 1819.

The preface to the first edition of the Work by which the reputation of Dr. Prout was established, bears date, December 12, 1820, and it was published early in the following year, under the title of "An Inquiry into the Nature and Treatment of Gravel, Calculus, and other Diseases connected with a Deranged Operation of the Urinary Organs;"—a thin octavo, of 227 pages. The clearness and accuracy of the views here enunciated, the mass of facts collected, the neatness with which they were arranged, and the importance of the deductions, marked it as a standard book on the subject, and placed Dr. Prout in the first rank of scientific physicians.

It might have been expected, that practice would now have flowed in abundantly; but such was not the case. A strong prejudice existed in those days amongst the leading physicians against chemical doctrines, and Dr. Prout, like many others, found it slow and difficult work to make head against such prejudices; eventually, as is well known, he completely succeeded; and before he became deaf, was on the most friendly terms with Dr. Baillie, and the other eminent physicians then practising in the Metropolis.

In 1825 Dr. Prout removed to No. 40, Sackville-street, where he continued to reside until his death. His waiting-room was hung round with choice pictures; but his consulting room bore evidence, in the piles of papers, the heaps of letters, and the chemical apparatus, of the all-absorbing pursuits in which the occupant was engaged.

In the above year there appeared a second edition of his work, containing much new and important matter, especially with reference to the pathology of the urine, and the characters of the deposits at different periods of life. The light thrown by Dr. Prout on the pathology of the urinary organs can only be fully appreciated by reflecting on the vast number of persons who suffer from derangements of this nature, and by witnessing the exquisite tortures, the sleepless nights, and days of agony, which are the lot of those afflicted with stone. If any one wishes to look upon a very accurate picture of these, drawn by an able hand, we beg to refer him to the "Narrative of the Last Illness of the Right Hon. the Earl of Orford (the celebrated Sir Robert Walpole), by J. Ranby." To have clearly made out the nature and causes, the characters and varieties, of urinary affections; to have laid down with precision the rules by which they may be detected, and their direful consequences averted, is surely to have conferred no small boon on suffering humanity. Were it more the custom in this country to bestow honours on those who devote their time, their talents, and their lives to benefit their fellow-creatures, such researches as Dr. Prout's would not have passed unrecognized. But deeds in arms and in diplomatic arts, improvements in shells and rockets for the destruction of life, monopolise such distinctions, whilst the gratitude of the afflicted, with the good opinion of mankind, are the chief rewards to be looked forward to by the philanthropic physician.

A volume might be written on Dr. Prout's merits as a chemist, but as it is rather with the physician that we are concerned, we shall offer but very brief comments on his chemical papers.

The first notice of *purpuric acid* is contained in his earliest communication to the Royal Society, a paper entitled "Description of an Acid Principle prepared from the Lithic or Uric Acid," read June 11, 1818. The object of this paper was to show that the purple substance obtained by heating a mixture of lithic and nitric acid, is a compound of ammonia with a peculiar acid principle, which he proposes to call "purpuric acid."

Five years elapsed before a second paper was presented to the Royal Society, but it appears that on June 20, 1822, some "experiments on the changes which take place in the fixed principle of the egg during incubation" were detailed. This was followed, December 11, 1823, by a valuable paper "On the Nature of the Acid and Saline Matters usually existing in the Stomach of Animals;" the object being to prove that the free acid there found is muriatic, and that the salts present are alkaline muriates. The paper, however, by far the most important in all its bearings, and leading to great results, was that "On the Ultimate Composition of Simple Alimentary Substances, with some Preliminary Remarks on the Analysis of Organized Bodies in general," which was read June 14, 1827. In this communication, intended to be the first of a series, Dr. Prout first brought forward his researches on food; the object he states to be, to determine the exact composition of the three great divisions, saccharine, oily, and albuminous, in which alimentary matters may be comprehended, and the subsequent changes induced in them. This paper formed the groundwork of the more extended observations and more elaborate investigations which were added to his work on the Urinary Organs, in the third edition of the latter. A striking proof of the opinion entertained of this paper, is afforded by its obtaining for the author the Copley Medal,—the highest distinction in the gift of the Royal Society. It was presented to Dr. Prout, November 30th, 1827, by the President, Davies Gilbert, who embraced the opportunity of paying the following elegant compliment to his merits:—"The Royal Society has viewed with peculiar satisfaction a new and accurate mode of analysis described by Dr. Prout, and founded on the most evident and simple principles; promising, not merely to disentangle any one particular combination, but to afford an insight into all the products created by living chemistry; we have hastened, therefore, to stamp with the highest mark of our approbation, as well the mode of analysis itself as the specimens of what, in the hands of Dr. Prout, it has already performed; not doubting that, by the exertion of such talents, such ingenuity, and such labour, their satisfaction will from year to year be continually increased."

Circumstances arose which caused Dr. Prout to abandon his intention of communicating a series of papers to the Philosophical Transactions; but the subject was elaborately worked out in the volume to which allusion has just been made.

The next of his publications, taken chronologically, was the Bridgewater Treatise. We may remind our readers, that the Earl of Bridgewater, who died in 1829, deputed the President of the Royal Society to nominate fit and proper persons to carry out the provisions of that portion of his will having reference to the Bridgewater Treatises. Davies Gilbert, the then President, who three years before had presented to him the Copley Medal, thought so highly of Dr. Prout's talents, that, with the concurrence of the Archbishop of Canterbury and Bishop of London, he entrusted to him the Treatise on "Chemistry, Meteorology, and the Function of Digestion, considered with reference to Natural Theology." It appeared in February 1834. The sale was rapid, and a large second edition appeared in the following June. Dr. Prout was unquestionably one of those who conscientiously fulfilled the trust imposed upon him; the work fully sustained his reputation, and its popularity was durable; for in 1845, a third edition was published, in which, by an enlargement of the page, much new matter was introduced, without the size of the volume being augmented.

In 1831, the Gulstonian Lectures at the College of Physicians were delivered by Dr. Prout, the subject being, "The Application of Chemistry to Physiology, Pathology, and Practice." Dr. Wilson Philip, taking umbrage at some of the opinions expressed in the lectures, attacked Dr. Prout in the pages of the *Medical Gazette*; the Doctor replied with spirit, and a rather sharp controversy ensued. The nature of this Memoir, which has no pretensions beyond a sketch, precludes our entering into the merits of the question at issue; and the same cause compels us to pass over many of the minor papers which issued from the prolific pen of Dr. Prout. To do full justice to all his publications would be to swell this article into a portly volume.

In 1840 there appeared, under the auspices of Mr. Churchill, the greatly-improved and much enlarged third edition of the "Opus Magnum," now numbering 483 pages. During the fifteen years which had elapsed since the publication of the second edition, chemistry and physiology had been advancing with rapid strides; and Dr. Prout, bringing to bear the great additional mass of information which he had acquired, completed with a masterly hand the edifice of which he had laid the foundation stone in 1820. The work, indeed, had been rewritten, and was "got up" (as the expression is) with all the adjuncts of excellent paper, good type, and correct plates. The title was altered to, "On the

Nature and Treatment of Stomach and Urinary Diseases; being an Inquiry into the Connexion of Diabetes, Calculus, and other Affections of the Kidney and Bladder with Indigestion." The views now elaborately unfolded excited, from their novelty, considerable attention, but do not seem to have made the impression their importance deserved. It is but just to Dr. Prout to state, that the great majority of the doctrines then advanced have stood the test of time, and been confirmed by subsequent researches. It must have been no small gratification to him to witness, during his lifetime, the triumph of those principles which he had enunciated, but which at first met with unmerited neglect. Had the doctrines contained in this third edition been properly appreciated, the palm of originality would not for so long have been awarded to the great chemist of Geissen. The metamorphosis of tissues of Liebig was only another term for the secondary assimilation of Prout, and it was he who announced, that it is from the waste or destruction of tissues which once formed constituent parts of the organism, that the various excretions, as urea, uric acid, carbonic acid, &c., are derived. The fame of Liebig for some time dazzled the eyes of the philosophic world, but when they came calmly to consider the points at issue, it was universally admitted, that the merit of discovery rested with the unassuming but far-seeing physician of Sackville-street. In 1843 a fourth edition of this book appeared, with a slight alteration of arrangement, and it was permitted to the Author to see the cordial reception given to the fifth edition, on its publication in 1848.

Some of the most important of the researches of Dr. Prout were those into the nature of the atmosphere. The apparatus for conducting the necessary experiments was perfect of its kind; and a very curious fact relative to the cholera was brought to light by its means. For six weeks previous to the actual breaking out of the cholera in London in 1832, Dr. Prout had been, day by day, laboriously endeavouring to determine, with the utmost nicety, the weight of a given quantity of air under precisely the same circumstances of temperature and pressure. On the 9th of February, 1832, the positive weight of the air suddenly appeared to rise above the usual standard. This was attributed at the time to some accidental error or derangement in the apparatus, and the succeeding observations were made with the most rigid scrutiny; but no error or derangement whatever could be detected. On the days immediately following, the weight of the air still continued above the standard, and this augmentation of weight continued during the whole time these experiments were carried on; that is, about six weeks. The conclusion drawn from this was, that the cause of the cholera was a poison in the air, whose high specific gravity and feeble diffusive powers kept it near the earth's surface, along which it insensibly crept.

The great majority of persons who have attained eminence have been early risers, and to this class Dr. Prout most emphatically belonged; winter and summer he breakfasted at seven, and always devoted some portion of the early morning to work. During the forenoon, and until dinner, he was engaged with patients; and again, in the evening, until ten, after which hour, he latterly never went out. His habits were studious and reserved, and the affliction of deafness, under which he laboured for many years before his death, prevented his entering into society; for which, indeed, he had but little leisure. Few persons had any conception of the claims upon his time; besides his extensive town practice, scarcely a day passed, that boxes and parcels did not arrive from the country, and the analysis of their contents, together with the necessary correspondence, consumed no small portion of each day.

Dr. Prout was a profound mathematician,—a turn of mind peculiarly fitting him for the analytical and critical investigations to which he was so warmly attached. He felt the importance of this branch of knowledge so strongly, that he was in the habit of saying, "without mathematics, chemistry cannot be properly followed." A distinguishing feature in his character was, unbounded liberality as to fees; and this, combined with the philosophic indifference with which he regarded expenditure when engaged in scientific experiments, prevented his amassing so large a fortune as might have been expected. In pursuing his investigations, especially those on the atmosphere, expense was the thing least considered, and he, in consequence, at one time possessed a considerable quantity of most elaborate philosophical apparatus. For example, there is a barometer in the possession of his family, which cost, before it was completed, an incredible sum. After this model, the instrument belonging to the Royal Society), which is the standard barometer of England,) was made under the eye of Dr. Prout.

Dr. Prout was one of the original members of the Athenæum, and for many years resided constantly in London. He was passionately fond of music, and built an organ, which he played with great skill; several anthems were also composed by him.

In appearance, Dr. Prout presented the beau ideal of a physician of the old school. He was of the middle height, and of slim figure. His head was nobly developed, and the intellectual qualities strongly marked; the hair soft, and snowy white. His features were delicately chiselled, eyes brilliant, complexion very pale, but the expression of his countenance combined benevolence with great intelligence. There was a blandness in his manner which inspired confidence, and set the most nervous patient at ease. He always dressed with scrupulous neatness; usually in black, with gaiters or silk stockings. There is an admirable portrait of him in possession of the family, by Hayes, a pupil of David, the favourite artist of Napoleon.

Dr. Prout was earlier appreciated abroad than at home. His foreign correspondence was extensive, and included the most distinguished of the scientific men on the Continent.

Although he had been ailing for some time, his decease was comparatively unexpected. For some days previously, he had been rather better than usual, and there was nothing in his condition to excite immediate alarm. On the morning of the 9th of April last, he had attempted to see a patient, but was unequal to the effort. In the afternoon, a change for the worse took place, and he breathed his last in the evening, his intellect remaining unclouded to the end. In deference to his wish, no *post-mortem* examination was made, but there is little doubt that an abscess bursting into the lungs caused his death. His remains now rest in the cemetery at Kensal-green, and, by his directions, a plain slab will be erected to his memory in Horton Church. Mrs. Prout has survived him, and also four sons and two daughters.

Dr. Prout presented an example worthy of imitation; an example of a man gifted by nature with high intellectual endowments, improving those endowments by constant study, investigation, and reflection. An amount of professional labour, such as would have wearied many men, was daily performed by him; and from this he turned for relaxation to arduous chemical and mechanical researches. His mind was of that rare quality which is ever open to the reception of truth, and which steadily pursues that object, undismayed by difficulties, and indifferent alike to ridicule and neglect. As a chemist, a philosopher, a physician, and a scholar, Dr. Prout stood pre-eminent; and his name will be remembered with respect when others who have sparkled with a greater but a fictitious brilliancy, have gone down to the grave, and their fame has been buried with them.

REVIEWS.

On Animal Chemistry, in its Application to Stomach and Renal Diseases. By H. Bence Jones, M.D., &c. Pp. 139. London. 1850.

We confess to some little disappointment when we found this work was merely a reprint of lectures already published. We had anticipated a new and more complete exposition of the relations of animal chemistry to stomach and renal complaints; and, from the known talents of Dr. Bence Jones, our expectations of the value of this work had been pitched high. Besides, we question much if it is advisable to allow any matter worth preserving to remain in the form of lectures. The form in which facts are presented to pupils is not generally that in which we should address them to a more highly trained audience, or should choose for their permanent and final shape. And in spite of the success which the published lectures of some of our eminent teachers have had, we question whether it had not been wiser, and more likely to lead to the admission of these works among the standard authorities of the time, to have remoulded, before their second publication, the expression of the facts, and to have regarded their lecture-form merely as a transition-stage between their birth and their maturity.

Having said thus much on this point, we can say, with

equal sincerity, that although we should have welcomed another book from Dr. Bence Jones more cordially, we are very happy to see his lectures, even in this form. There is pith and marrow in them, which we should not wish to see buried and lost beneath the dead leaves with which ephemeral journals cover their successive numbers. They contain the thoughts and opinions of a most able and original thinker; opinions which are entitled to be known and deeply considered of all men. Dr. Jones is perfectly right in giving to his lectures a form more permanent, and a circulation less restricted, than he could have commanded had he remained immured in the pages of our Contemporary.

The First Lecture is occupied with the consideration of food. The views of the Liebigian school, slightly modified, form its basis, and its tendency is to adopt in its extremest rigour the doctrine which teaches, that different classes of aliments cannot be converted into each other; that albumen or fibrine, for example, cannot be converted into starch or sugar, or the reverse, by any normal or unusual power which can exist in the animal body. Now, this is a point of fundamental importance, which may or may not be true, but which is disputable, and is disputed. It requires more discussion than Dr. Jones accords to it. Even Dr. Jones's great authority, Dr. Prout, to whom, in his preface, he justly and gracefully acknowledges his obligations, held doctrines which were directly antagonistic to his own, and assumed, as fundamental to many speculations, not only the doctrine of the convertibility of saccharine aliments into albuminous principles, of albuminous into oleaginous bodies, and similar transitions, but even of transformations still more wonderful.

Personally, we suspect Dr. Jones's opinions are the correct ones, but the point gives us an opportunity of justifying our criticism on the lecture-form of his work. It would be impossible, or rather would be unwise, to enter with students into the pro and con arguments of such a question. The argument would be long and tedious, and the conclusion qualified. Dr. Jones, therefore, selects his conclusion, arrays most lucidly his *positive* argument for it, and contents himself with implying the existence of an opposite view merely by the terms of his affirmative proposition. It is true the affirmative suggests its negative; but a mere suggestion is hardly sufficient embodiment for so important a creed as that which he denies. (a)

Pass we, however, from Lecture I., On Food, to Lecture II., On the Digestion of the Food, an excellent Chapter, in which a great deal of information is communicated both clearly and concisely. The acid of the gastric juice (whose nature is left undetermined), is said to be its most important constituent; its albuminous substance is the next important. Dr. Jones merely says of this substance, which has been so much talked of under the name of Pepsin, that its exact nature is not known; that it is not albumen nor epithelium; but far more likely a substance like diastase, undergoing changes which it communicates catalytically to contiguous molecules. The action of the gastric juice on the two great classes of organic solid aliments, viz., nitrogenised and non-nitrogenised, that is, starchy, saccharine, and oily substances, is next briefly considered. In the case of the albuminous principles there is simple solution by the acid and pepsin preparatory to absorption; the starchy compounds are converted, in all probability, into dextrine, sugar, and vegetable acid; and the pancreatic fluid and the bile (?) are said to be generally considered as the agents which make the fat and oil of the food soluble. Here we think Bernard's beautiful observations, on the effect of the pancreatic juice on oil, should have been noticed, even in the author's rapid and brief enumeration.

Lecture III. is on the Blood, and is chiefly occupied with an account of the method of analysis, and some cases illustrating the facts of the presence of urate of soda in gouty blood. Lecture IV. is on Urinary Calculi, and on the methods of their Analysis. In neither of these chapters is there anything which need detain us.

The fifth chapter comprises the subjects of the quantity and acidity of the urine. Dr. Jones most justly condemns, as untrue, the tables given for the calculation of the amount of solids in the urine. With so heterogeneous a fluid, the only correct way is evaporation and weighing. The varying acidity of the healthy urine is detailed in the same way as in the paper in the Philosophical Transactions; the rule being, that the activity of the stomach removes the acid from the urine, and that when digestion is completed, the acid which before passed into the stomach is directed to the kidneys, so that the acidity of the stomach (which is determined by the presence of food,) and the acidity of the urine are in a directly inverse ratio to each other.

The next four chapters discuss the subjects of uric acid and its deposits, of oxalate of lime and sulphates, of the alkaline, and earthy phosphates, and of the alkalescence of the urine. These are excellent chapters, and contain some original observations of great importance. More important matter still, however, obliges us to leave them untouched.

The Tenth Lecture is on Albuminous Urine, a subject of deeper interest than perhaps any other pathological state referred to in the whole work. It is dismissed, however, in ten pages, and four of these are occupied with the simple chemical rules for its detection. Then comes the question, what the albumen indicates? The answer varies, says the author, according as it is accompanied by blood-discs, pus-cells, or fibrinous casts, or exists without these substances. Thus, albumen *per se* "indicates only excessive congestion of some part of the urinary organs;" if with fibrinous moulds, it shows Bright's disease, or the result of scarlet fever; with blood-discs (without casts) and crystalline deposits, renal calculus; with pus-cells, suppurative inflammation, probably of the pelvis. And so the concurrence of fibrinous casts, pus-cells, and albumen, indicate, therefore, both Bright's disease and pyelitis; the concurrence of albumen, blood, and pus without casts, points to calculous pyelitis. And so, to sum up the most compound assemblage and most complex state, "when fibrinous moulds, blood globules, pus globules, albumen, and crystalline deposit were seen, then degeneration of the kidney, inflammation, and calculus, were found on *post-mortem* examination." (P. 106.)

Are these views absolutely true, and are the innumerable phenomena of these diseases comprehended in such simple aphorisms? We have no difficulty in saying, that, while there is some truth in every statement, it requires both qualification and reservation, without which the very truth becomes a cause of error, nay, is itself a falsity. Albuminuria is not thus hastily to be probed, nor are its conditions capable of such simple expression. There are diseased states yet to be studied,—states of the blood, and perhaps of some organs besides the kidneys, which possibly are of greater importance, in the production of albuminuria, than any diseased condition of the kidneys themselves.

But, leaving this chapter, let us pass to the next, on Diabetes and Diuresis, a very interesting and more philosophical chapter than the last. Diabetes is considered to be caused by arrest of the changes which the starch grain undergoes, at its second point, viz., at the sugar. The *healthy changes* are, starch, dextrine, sugar, vegetable acid, carbonic acid; the diseased are, starch, dextrine, sugar, then there is no further transformation. Dr. Jones thinks, too, there is another disease, in which the change proceeds a step further—to the vegetable acid—and there stops. These views are put forward rather sketchily, and many other points of extreme importance are left almost unconsidered; but, as we intend to devote an early review to the subject of Diabetes, we will return to Dr. Jones's opinions hereafter. We will remark only, that we have always been under the impression that Bouchardat has lately many times declared, that he was in error in speaking of the "tasteless sugar" to which Dr. Jones refers, and that he unintentionally misled the eminent men who have followed him. We cannot, at this present moment, cite chapter and verse, but even very lately we saw, in one of the debates at the "Académie," an announcement of this kind. But Dr. Jones, perhaps, holds the other evidence, for the presence of the so-called "tasteless sugar," as sufficient.

The twelfth chapter is on the relation of the urine to the food and system, and on the general method of examining the urine. There are some interesting points here, but we have reached the range of our tether.

In conclusion, let us in all modesty exercise the reviewer's privilege, and presume to praise one, who probably, were we otherwise than anonymous, might think our praise not worth the thanks. But we will praise Dr. Bence Jones, as one who has laid on the altar of science fragrant and precious

(a) We are surprised also, that Dr. Jones, in his section on Diabetes, has not seen the extreme importance of this point. He alludes to Bensch's statement, that sugar of milk is found in the milk of carnivora fed exclusively on meat; but he says nothing of Bernard's experiments, which seem to argue strongly for the convertibility of albuminous compounds into sugar. In fact, he blinks the question, and restricts himself to other less obscure points.

gifts, and who has cultivated our profession in a truthful and earnest mood. The character of his mind is that of ingenuity, and he is a facile and easy workman. Let us beg of him, however, to avoid one immense fault, of which this kind of mind is most susceptible, and of which, did we choose, we could point out in this present work more than one example. He is too sketchy, too ready to generalize, to go before the facts even, and to convert the results of experiments into the expression of laws. For one example of this let us instance the range of propositions at page 87. The experiments on the phosphates, beautiful as they are, important as they are, are comparatively few in number, and have been yet confirmed by no one. The universal propositions based on them can be considered by no prudent observer as *demonstrated;* they are simply *probable* propositions, waiting the stamp of further research. In no other science but medicine would they receive immediate currency and unprotested acceptance. The facts are facts, and are accepted as such; but they cannot warrant, at present, general inferences.

But away with fault-finding, when we have such reason to employ the critic's genial faculty of praise, and let us beg all our readers to observe, that if we have ventured to criticise some few things in this book, it is not that we do not esteem the book as a most valuable addition to our English literature, and its author as one of our best and most accomplished medical chemists, but because in proportion to a man's height and authority must his statements be well considered by those who are content to learn wisdom at his hands.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ANATOMY OF EMPHYSEMA.

In a work lately published by Rossignol—"Recherches Anatomiques, Cliniques, et Expérimentales, sur la Nature et les Causes de l'Emphyseme Pulmonaire, (Asthmé Continu des Anciens,) par le Dr. Rossignol,"—we find the following statements regarding the anatomical conditions of pulmonary emphysema. The *lobular bronchi* are either dilated or contracted, atrophied, or hypertrophied; the *air-cells* present but one constant and essential lesion, viz., a thinning and gradual disappearance of the partitions between them; whence result cavities, which have been wrongly considered as dilated single air-cells. The *blood-vessels* undergo a gradual diminution, proportioned to the disappearance of the air-cells; in extreme cases there is a complete disappearance of vessels, whence result the impairment of the circulation, and the cardiac disease so frequently consecutive on emphysema. In addition to these lesions, there may be hypertrophy of the cellular tissue between the lobules and of the envelope covering them. Of these affections, the dilatation of the "infundibula," to use Rossignol's phraseology, and of the capillary bronchial tubes, constitutes the primitive and fundamental lesion, from which the disappearance of the partitions between the air-cells or alveoli, (to use the author's terms,) and the obliteration of vessels naturally proceed. Consequently Rossignol considers that the phrase, "capillary or terminal bronchiectasis," would be a better appellation than emphysema. As to the cause of this dilatation or bronchiectasis, the author proposes to consider it in another work. Rossignol examines emphysematous lungs by injecting the pulmonary artery, and then by inflating, drying, and making thin slices of the lung.

MENINGEAL APOPLEXY.

Four observations of hæmorrhage into the arachnoid cavity of the cerebrum are recorded by M. Schutzenberger, three in men, aged 34, 69, and 63 years, and one in a woman aged 44 years. In all the cases the blood became more or less encysted, that is, enclosed in a pseudo-membrane formed by the most external portions of the clot, which, in the oldest cases, became intimately connected with the dura mater, in which membrane new capillary vessels were abundantly formed. In one of these cases the attack was sudden, that is to say, without known cause the patient was suddenly seized with vertigo, pain in the head, and fell suddenly, without entirely losing consciousness. In another case, the patient was suddenly attacked with feebleness of both lower extremities, which continued till death, two years afterwards, and was attended, subsequently, by trembling of the hands. In this case intellect and sensibility were preserved. In the two other cases there were precursory symptoms of vertigo, headache, a certain degree of stupor, &c.

The functional lesions, coinciding with the sanguineous effusion, affected most specially, mobility, the intelligence, and sensibility, though in various degrees. In no case was mobility entirely abolished; in other words, there was no absolute paralysis, but a general feebleness and slowness of movement. In all the cases there was stiffness of the limbs, but no contraction; that is to say, no permanent flexion of the limb. Intellect remained intact in an individual, with hæmorrhage over both hemispheres of slight amount. In the three other cases impairment of the intellect was noted as the dominant phenomenon, and passed gradually into coma. This failure of intellect appeared to coincide, in all the three cases, with the probable time of the occurrence of the hæmorrhage. In the case in which intellect was preserved sensibility was also unimpaired. In all the other cases sensibility was obtuse in proportion to the intellectual impairment; it was in no cases abolished. In one case there were pains in the extremities, apparently muscular, and coming on only after attempts at movement.

The general inference from the observations appears then to be, that the phenomena consequent on meningeal extravasation, not immediately fatal, are feebleness of motor power, especially over the lower extremities, but not paralysis; impairment of intellect if the extravasation be considerable; and obtunded sensibility under the same circumstances. These four cases appear to have afforded no example of hyperæsthesia of the skin, darting pains in the extremities, or rigid contraction.—*Gaz. Méd. de Strasbourg, Mai, Juin, Juillet*, 1849; *Archiv. Gén., Jan.*, 1850.

CASEIN IN HEALTHY BLOOD.

In our number for March 30th, appeared a communication from our Danish correspondent, in which a paper published in his own Journal ("Bibliothek nach Lager," by M. Panum, of Copenhagen,) was analysed. This paper has now appeared in "Virchow und Reinhardt's Archiv.," and we shall proceed to abstract from it such points as were not reported by our correspondent. The main facts may, however, be first repeated. When water is added to the serum of blood, in the proportion of from 8 to 16 or 20 parts of water to 1 of serum, the fluid becomes opalescent, and, on standing for 24 hours there is deposited, in many cases, a tolerably voluminous white precipitate. If a precipitate is not thus caused, the addition of an extremely minute quantity of acetic acid will at once produce it, and so also will the passage through the fluid of a current of carbonic acid gas. The identity of the precipitates in all these cases is proved by experiments. This white precipitate is readily separated by the filter; it is soluble in acetic acid, (hence, if an excess of acid is added to the diluted serum, it does not appear); in the caustic alkalics and their carbonates; in solutions of the phosphate of soda, the sulphate of magnesia, sal-ammoniac, and the chlorides of sodium, calcium, barium, &c.; but it is insoluble in ether, cold alcohol, and water. It appears to be held in solution in the blood by the alkaline salts; and when these are much diluted, or are neutralised by an extremely small quantity of acetic or carbonic acid, it is precipitated. After these elementary considerations, M. Panum proceeds to inquire into the nature of the substance thus precipitated. He decides against the possibility of its being fibrine, from its not assuming the usual form of coagulated fibrine, from the difference in the mode in which it passes from the soluble to the insoluble form, and from the different reactions which it gives with reagents, more especially as to its ready solution in acetic acid and many neutral salts. It is again distinguished from albumen, according to M. Panum, by its precipitation by water and weak acetic acid; and it is considered not likely to be a "transmutation-matter" of albumen. There remain only three protein-compounds to be considered, viz., binoxide of protein, natron-albuminat, and casein. The protein-bioxyd of Mülder appears to be distinguished by hardly any character than that of insolubility in water; so that it is difficult to say of any undetermined protein-body that it is not binoxide of protein; yet the fact of the ready precipitation of the substance in question by carbonic acid gas, while

it is not precipitated by a stream of air, deprived of its carbonic acid, seems an argument against its identity with Mülder's binoxide of protein. The "natron-albuminat" is said to be distinguished by its sparing solubility in acetic acid. It appears, therefore, that the substance indicated can only be casein, which substance, as already shown by Scherer and Rochleder, is, when pure, insoluble in water, but is readily dissolved by potash, soda, or lime, from which solutions neutralization by an acid will at once precipitate it. The casein procured from milk is dissolved at once by phosphate of soda, but is soluble with difficulty in chloride of sodium; in this last point showing a difference with the presumed casein of the blood,—a difference to which, however, M. Panum does not allow much weight, as he thinks the method of preparing the casein from milk, by the addition of alcohol and ether, and its being dried, is sufficient to account for it. The behaviour of this substance towards acetic acid is, however, the greatest proof of its being really casein. In the cases in which casein has been already indicated in the blood, viz., by Gmelin, Marchand, and Hunefield, the character of precipitation by a small, and re-solution by a large, quantity of acetic acid, was the only one which was held to prove the identity with casein of the substance found by these observers.

After these and some other interesting observations on the chemical characters of this substance (which has not, however, been submitted to elementary or ash analysis), M. Panum proceeds to make a few remarks on the importance to pathology and physiology of a correct knowledge of this substance. He inquires how nearly it may be related to nutrition and cell-growth, and refers to the ease with which molecules of this substance may possibly be precipitated from the blood, and to the agreement which the cell membranes of blood-corpuscles, milk-corpuscles, and pus-cells show with casein, as points which may possibly be found to have important practical bearings. He then indicates, as an interesting subject for inquiry, the relations which may exist between the amorphous molecular masses found in almost all exudations and this substance, and suggests whether, if they are identical, the absorbent and antiphlogistic power of some salts may not be attributable to the ease with which this substance is dissolved by them. *Ueber einen Constanten, mit dem Casein übereinstimmenden Bestandtheil des Blutes:* Von Panum. Virch. und Reinh. Archiv. Vol. III. pt. 2, 1850; pp. 251 to 264.

[It would be premature at present to agree with the author of this very interesting paper on the identity of the substance in question with casein. The different forms under which albumen can appear, render it almost impossible to say, without further investigation, that the substance discovered by Panum may not be albumen. It has been already noticed by Scherer, that solutions of albumen, under certain circumstances, are rendered milky by the addition of a large quantity of water, and that subsequently a precipitate may fall. The greater or less amount of alkali seems to be the cause of this.—(See Lehmann's "Physiologischen Chemie—Zweite Auflage," 1850; p. 346.) It is a modification of albumen resulting from some such cause as this, in all probability, which has led Mialhe to describe a substance in the blood as "albuminose." The behaviour of albumen under re-agents, in the presence of a greater or less amount of salts, neutral or alkaline, is a problem which has hardly yet been worked out. Moreover, our knowledge of casein itself is, at present, very imperfect; and some chemists, as Mülder and Schlossberger, have intimated, that possibly at least two substances have been commonly included under this term. We make these remarks simply because we think it more prudent to wait for additional observations before deciding that the substance indicated by M. Panum is casein. We may observe, however, that we have, to a certain extent, repeated the experiments of this observer on human blood, and find them perfectly accurate.]

Newnham.—Illegal Medical Practice.—On Friday, the 7th instant, a verdict was recovered in the County Court of Newnham, by the Society of Apothecaries, against Mr. William Boyle Norcott, of that place, for acting as an apothecary without being legally qualified to do so. Mr. Norcott admitted the facts, and thereupon a verdict was given for 20*l.*, the amount of penalty, and the costs.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

[Paris Correspondence.]

ALIMENTATION.

An animated discussion on this important question is now going on at the Institut, between M. de Gasparin and M. Magendie; but science does not seem to have yet revealed to us her "last word;" and, accordingly, the opposing statements and theories of her servants only render the subject more obscure. M. de Gasparin still insists that the nutritive qualities of nutritious substances may be estimated according to the quantity of nitrogen which they contain. Here practice fully supports the theory. Practical farmers are well aware that ten pounds of hay are equivalent to six and a-half pounds of corn. Now, as the former contains about 1·15 per cent. of nitrogen, and the latter 1·77 per cent., it is evident that experience but confirms the results of analysis.

In the small towns of the south of France the workmen live alternately on meat and vegetables. Long experience has taught them the equivalents of each; and what are they? 250 parts of meat are equivalent to 150 parts of dry haricots. Now the former contains 2·42 per cent. of nitrogen, the latter 3·80 per cent.; and here, again, the theory is consonant to the results of experience. M. Magendie, to all this, replies by an experiment, which he regards as decisive. A carnivorous animal requires exactly the same weight of dried flesh for its support as of raw flesh; but, as the food in drying loses nine-tenths of its weight without getting rid of any of its nitrogen, the animal fed on dried flesh consumes nine times more azote than the other.

This experiment, however, cannot be regarded as a fair one, because the dried powder may disturb digestion by the enormous absorbtion of fluid from the digestive canal. Besides, it is well known that travellers carry with them quantities of dried flesh, which they use by adding to it some water—thus obtaining a great economy of weight under the same amount of nutritious matter.

SCOTLAND.

[Edinburgh Correspondence.]

MEETING OF THE BRITISH ASSOCIATION AT EDINBURGH.

We now look forward to the approaching meeting of this Association with daily increasing interest. That there is to be no separate medical section seems to be at length determined. Anatomical, physiological, and pathological papers are to be read before the Natural History section. We have no reason to fear that this arrangement will, in any way, disappoint us of the attendance of a numerous assemblage of our medical brethren from a distance. We trust that the prospect of seeing and hearing a number of the distinguished leaders in general science—not to omit physiological science—will prove a sufficient attraction to the members of a liberal profession. The branch of general science which the medical profession can claim as peculiarly its own, is the department of physiology. The part, however, which men engaged in practice can take in the further advance of physiology must be rather limited. The necessity for the investigation of minute anatomical structure, and for nice chemical analysis, almost precludes those so situated from engaging actively in the attempt to disentangle the knots which at present fetter the steady progress of physiology. Hard, however, as the task is to keep pace with microscopic anatomy, and the analyses of organic chemistry, it is to be deprecated that any other authority should be permitted to displace the medical profession from the office it has so long held, of giving judgment in questions of physiology. There is one department of physiology, namely, the psychological department, for the cultivation of which those engaged in the practice of medicine have particular opportunities. Notwithstanding the great neglect into which psychological studies have fallen of late years in this country, their importance in very many points of view, and in no point more than as regards medicine, is undeniably very great. The approach to psy-

chology from the side of physiology possesses some advantages over the purely metaphysical mode of investigation. Our Professor of Logic, Sir William Hamilton, seems to have become fully aware of the light which the physiology of the nervous system is calculated to throw on many metaphysical points. The late edition of Dr. Reid's works, though still uncompleted, is a perfect mine of knowledge available to the physiologist who should wish to embark in the attempt to resolve metaphysical difficulties. We trust this subject is destined still to become a favourite study with the medical profession. The current of the time runs, however, rather counter to this line of study, and perhaps the philosophers of the section of Natural History, at the approaching meeting of the Association, would raise some doubts as to whether a discourse on Personal Identity fell within their department. We hear we are to have Dr. Marshall Hall among our visitors. We wish he would lead off on a psychological subject; and, as he has done so much to teach that many acts formerly supposed to depend on the consciousness of sensation, take place independently of sensation, so, we think, he owes us the benefit of his talents in the advancement of the knowledge of those phenomena which are undeniably phenomena of consciousness. Among the preparations for the reception of the Association, the duties of hospitality are not to be neglected. It is announced that our College of Physicians is to give an entertainment to the leading members, and that Mr. Syme, as President of our College of Surgeons, is to give a *fête* at his country house near Morningside, where the botanical members will have the additional gratification of inspecting a magnificent collection of exotic plants.

EDINBURGH AND GLASGOW MEDICAL CLUB.

The annual meeting of this club took place on Thursday, June 27th, at Falkirk, when upwards of twenty members, in nearly equal proportion from each city, together with Drs. Girdwood and Hamilton, of Falkirk, dined and passed a very pleasant evening together. Professor Simpson, of Edinburgh, was to have been in the chair, but he was detained from the meeting by an unluckily-timed, tedious case, and Professor Rainey, of Glasgow, well supplied his place. Before dinner, those members who had arrived early, cicerone by Professor Trail, of Edinburgh, viewed some of the Roman remains in the neighbourhood of Falkirk, particularly several very distinct portions of Graham's Dyke, as the wall or vallum of Antoninus is popularly called; also some interesting geological appearances pointed out by Dr. Hamilton. The meeting of the club next year is fixed to take place at Stirling.

IMPERMEABLE STRICTURE.

As was already noticed in the *Medical Times*, Mr. Syme, at a late meeting of our Medico-Chirurgical Society, promised to communicate to the profession some letters addressed, in the beginning of the present century, to Mr. Benjamin Bell, the author of the system of surgery, by several eminent surgeons of that day, on the use of caustic for the treatment of strictures of the urethra. These letters have just been published, with a commentary by Mr. Syme. Among them are letters from Mr. John Pearson, of London; Mr. Hey, of Leeds; Mr. Park, of Liverpool; Mr. Ingham, of Newcastle; Mr. Chilvers, of London; and Dr. Hare, of Calcutta. In general these letters agree in condemning the use of caustic as at once unsafe and unnecessary. Mr. Hey, of Leeds, says, "I am truly sorry that the caustic bougie is so fashionable an instrument; but the mischiefs which follow from its application will, I am inclined to think, bring us back to the use of a safer remedy. Even the mildest bougies should be used with great caution for the removal of considerable strictures, especially when they are seated in the membranous part of the urethra. The weakness of its coats, and the curvature of its canal in that part, may cause the bougie to form a false route, unless the point of the instrument be carried forward with great gentleness. We have cases upon record which demonstrate the necessity of this caution." Mr. Pearson says, "I entirely agree with you in the opinion, that the method of treating strictures by caustic, though useful in a very small proportion of cases, is a practice generally dangerous and unwarrantable, and ought by no means to be introduced into general use. * * * * I have known new strictures produced, and a urethra partially obstructed has become absolutely impermeable during the use of the armed bougie, when the caustic has been applied by Mr. Hey himself." * * * * I will now communicate an anecdote, which will prove how far some people's prejudices go in favour of caustic. An army physician had the misfortune to rupture the tendo-Achillis partially. He became so lame, and was afflicted with such severe spasms that he was confined to bed during several months. Among other medical friends Mr. Hey visited him, and suggested the probability of caustic applied to his urethra relieving the spasms. Although the good Doctor had never been conscious of any obstruction in the urinary canal, he submitted to the operation more than once without any effect, good or bad. His good sense, however, soon made him ashamed of his credulity, and he returned to the use of such remedies as were adapted to the nature of the local injury. Mr. Syme has appended to these letters some caustic remarks on the alleged unsuccessful trials in London of his operation for the cure of obstinate stricture by cutting in the perinæum.

IRELAND.

(Dublin Correspondence.)

JACOB ON THE EYE.

An interesting paper, recently read to the Royal Society, on the development of the *tunica Jacobi* of the eye, reminds us that we have not noticed the work of the indefatigable surgeon of the Baggot-street Hospital; perhaps a word or two on its salient points, and on the character of this membrane bearing his name, may be interesting to your readers.

The microscopic examination of the brain of the chick and young bird exhibits the *tunica Jacobi* on the 13th day, as a fine pale granular stratum, which covers the globular nuclei of the more essential embryonal retina; the latter appearing so early as the 8th day. About the 15th day some brilliant yellowish granules become imbedded in the *tunica Jacobi*, and around them a delicate cell wall is traced; they soon acquire an oval shape, then become elongated, and about the 18th almost perfect rods are formed, disposed in an imbricated manner, their nuclei placed generally at the apex of the rods. On the 21st the membrane seems perfect. The practical nature of these apparently abstract details must be evident at a glance, as showing the serous character of this membrane. Dr. Jacob, in his new work, wages war with the term "iritis," as used so commonly; the more proper designation being inflammation of the eye-ball; the iris, he says, seldom or never becomes inflamed by itself; the retina, with the membrane bearing his name, and several other parts of the eye, all sharing in the disease. The essential part of the retina, to continue its microscopic examination, would seem quite analogous to the cineritious matter of the brain, about which Mr. Solly has lately given us such very interesting details.

The microscope shows a very curious and perfect analogy between the parts of the eye and parts of the ear; a matter often suggested by the theories of colours and their harmonic combinations, and the theories and combinations of our Meyerbeers and Mozarts,—suggested by various other things also, but not till now, possibly, so well proved. Both eye and ear in fact arise as protruded portions of cerebral mass, hollow and communicating with the parent cell. The development of the eye is such as I have alluded to; that of the ear is quite analogous. In process of time the cells separate,—assume a pyriform shape,—one becoming an eye, the other an ear. The analogy in the fully formed ear and eye, I need scarcely remark, is not less perfect.

Dr. Jacob suggests the abandonment of the term "iritis," "as fastening the attention on the iris when the retina should be the prominent object;" the latter, indeed, is so often inflamed, in bad cases of so called iritis,—shutting up the pupil,—that he thinks artificial pupil of little or no use, the deeper textures being always diseased. Diminution of sight, in so called syphilitic iritis, he looks on as depending on the increased vascularity of the choroid on which the retina is expanded; but I need scarcely say, in many of these melancholy cases we have the capsule of the lens and all the visual apparatus of the front of the eye just as often engaged.

A very practical point Dr. Jacob lays emphasis on is, that we too often overlook inflammation of the eye-ball; and he warns dispensary practitioners, especially in Ireland,

against the common practice of styling those cases "amaurosis," and ascribing it to the stomach and bowels and all imaginary parts but the right one, much valuable time being lost. Dr. Jacob all but ignores the existence of rheumatic inflammation of the eye. Sclerotitis, at least, should be called iritis and retinitis. His descriptions of inflammation of the eye-ball are excellent, and the work in every way seems worthy of this distinguished surgeon.

ACUPUNCTURE.

Mr. Sunter continues his interesting cases in the *Press*. One of the last, the details of which he has given, is that of a soldier, who came to him complaining of swelling of the gums, and very great difficulty in opening the mouth and swallowing. On examining the parts and pressing the finger on the back of the masseter muscle through the mouth, the man winced, and gave evidence of very considerable pain. There seemed to be no inflammation or abscess to account for it; the glands were tender. From a very minute inquiry into the history of the case, Mr. Sunter came to the conclusion it was one analogous to "crick in the neck," in the muscles engaged in that unpleasant affection. Previous treatment seemed only to make things worse; and on this view of the case,—that it differed little from paralysis of the masseter,—an acupuncture needle was struck into this muscle, which acted like magic; the man at once got well.

DEAFNESS FROM GOUT.

A case of deafness, of some standing, is also given by Sunter, of a rather troublesome character, continuing for some time, till the key to the matter was discovered in its depending on gout. The first circumstance that led to the suspicion of gout was, one ear seeming attacked as the other got better. The transient and alternating character of gouty diseases is laid much stress on by the chief writers of the Irish school,—Graves, for instance, gives a very curious case of what he calls "gout in the stomach" keeping up an alternate action with a swelling on the forehead, involving the cheek and eye. It is well occasionally to refresh our recollection with the experiences of such men as Graves, and his able colleague, Stokes. The latter has made the remark, too, with respect to colchicum and pericarditis, that in almost all cases of the latter, as well as of hepatic and pulmonary disease in gouty men, the patients used colchicum. Whether there is really any connexion between the two,—whether the *post hoc* may assume the rather serious position of a *propter hoc*, may be, perhaps, open to discussion. The subject of gout and rheumatism has been so recently before the profession in England, as well as in France, where, M. Martin Solon says, the profession is broken up into two hostile camps, that I am unwilling to enter the lists. A case of deafness, depending on gout, and yielding to treatment adapted to that disease, is worth recollecting,—a practical point of this sort being more valuable than several furlongs of speculations, on which men will do everything but agree.

GENERAL CORRESPONDENCE.

THE CASUISTRY OF MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—The case in casuistry propounded by "One who is called a Homœopathist" is too defective in details, and the details given are too inconsistent with each other for a definite opinion; it has the appearance, indeed, of a hypothetical case. Taking it as it is on paper, and as a *bonâ fide* case, I come to the conclusion that, in treating the "*great majority*" of his patients "according to the homœopathic principle," (?) the writer has not concealed from that "great majority," that he treated them on that "homœopathic principle," whatever dogma or notion of the homœopathists he may mean to designate by the term; and, consequently, that he has made a public profession of homœopathy, and is justly "called a homœopathist," and identified with the charlatan and irregular practitioner included in the term. If he thinks small and frequently-repeated doses of bryony or aconite will cure a pleurisy, he has an undoubted right to administer the doses, but not so to administer them as to identify himself with the principles or practices of professed homœopathists; nor can the administration of a few remedies, in ordinary doses, or the mere negative acknowledgment of the utility and efficacy of so administering medicines generally be received as an excuse for, or as a set-off against, his *avowed* treatment of the "great majority" of his cases on "the *homœopathic* principle."

I would suggest, that the best thing a practitioner like "One who is called a Homœopathist" can do is, to study his art with the aids actually furnished by anatomy, physiology, pathology, and organic chemistry, and, with a diligent reference to the accumulated experience of the profession.

I am, Sir,

The Writer of the Article "On the Relation of True Medicine to Empirical Systems," in the "Medico-Chirurgical Review."

P.S. Dr. Inglis will observe, that he has misapprehended my meaning, and, on a second perusal, will find, that I nowhere recommend the orthodox practitioner to meet a professed homœopathist in consultation, or attend a case with him, but just the contrary.

P.S. Since writing the above, I observe, that the Editor of the *Lancet* refuses to publish my former explanatory letter, on the ground that it was not sent to him. A direct appeal *to his sense of justice*, through the columns of a Contemporary, must be looked upon as more emphatic and more imperative than a private note to the same effect. I repeat that appeal, and again call upon the Editor of the *Lancet* to publish my letter in his journal.

[To the Editor of the Medical Times.]

Sir,—Your note, appended to the letter of "One who is called a Homœopathist," which appeared in your Journal of last week, inviting replies to the anonymous querist, alters the position of the unknown writer, and entitles him to the benefit of the opinion of the profession, which he professes to wish to obtain.

Your Correspondent, perhaps too readily, takes it for granted, that the "Writer of the Article in the *British and Foreign Medico-Chirurgical Review*" is an acknowledged authority upon the subject of Medical Ethics, and he urges, seemingly as a matter of complaint, that the following paragraph, by that writer, does not apply to him:—"If a regularly educated and legally qualified practitioner *publicly professes* that he treats disease homœopathically, to the exclusion of all other methods of treatment, in virtue of that public profession he becomes a charlatan, and should be treated as such; consequently, he neither ought to be met in consultation nor associated with in attendance upon a case."

Now, I think few, very few, can be found to assent either to the ethics, or to the logic of the above paragraph, from which it would appear that a charlatan is merely a charlatan "*in virtue of his public profession*," and that a homœopath is only a charlatan if he profess to exclude "*all* other methods of treatment"! But your Correspondent, professing to be only a *semi-homœopath*, and professing to treat disease either way, thinks, and doubtless thinks properly, that his case has not been met by the paragraph alluded to, for, according to its argument *he* has not become a charlatan "*in virtue of a public profession*." In refraining from further comment upon the views of the writer in the *Quarterly*, upon this particular point, I would beg to refer your readers to my former letter, and to his "explanation," which appeared synchronously in your Journal of the 15th of this month.

Although, as has just been noticed, your Correspondent is not an out-and-out homœopath, by which he avoids a place in the category of charlatans alluded to; he nevertheless confesses to prescribe, "*in the majority of cases*," according to "*the* homœopathic principle;" whilst he condescends, "in suitable cases," to administer "emetics, purgatives, and narcotics; stimulants, and cod-liver oil;" neither objecting to, but, on the contrary, "admitting the utility of blood-letting!" Here the treating of disease on "the homœopathic principle" is prominently introduced, and the *regular* treatment is evidently only had recourse to in those real cases of disease which must ever baffle the do-nothing plan; yet this latter treatment, which is had recourse to only of necessity, is put forth as a saving clause, to claim exemption from those penalties which most justly fall, by the unanimous voice of the profession, upon the more honest homœopath.

As you have asked, Mr. Editor, for an expression of

opinion from the profession relative to those men who hesitate not to practise *doubly*, and as to the position in which they ought to be held by the regular practitioner, I trust that your call may be responded to at once and honestly; and, as the aggregate can only be made up by the accumulated opinions of individuals, I beg willingly, and without hesitation, yet humbly, to remit to you mine, should you consider it worthy of a place in your Journal.

In my opinion, then, the "legally-qualified practitioner" who professes to treat disease *both* upon "the homœopathic principle" *and* upon the recognised principles of our profession, must be either a man devoid of all conscience and uprightness,—a degraded and abject mammon-worshipper,—or, he must be most sadly defective in that quality of mind which is so essential to a medical man—judgment. He either recognises, or says he does, a principle which, without any principle, he in his mind denies, or disbelieves; or he believes that, by acting upon two antagonistic principles, he can effect the same end; and that if one plan of treatment fail the other *may* succeed. He *professes* to treat disease homœopathically, but administers "poisonous doses of drugs"—(*Medical Times*, June 15, p. 428); or, he professes to prescribe upon "*the* homœopathic principle," but ere long cures the case by the regular effective remedies. At one time the decillionth part of a grain of an anti-cathartic is given to overcome obstinate constipation; but, in the emergency, "*the* principle" is lost sight of, and the patient is relieved by catharties themselves in rational doses. At another time violent cholera is treated by infinitesimal doses of veratrum or arsenic; but these are followed up by moderate doses, *frequently repeated*, ("every five minutes,") of tincture of camphor; which latter more rational treatment is *falsely* pawned upon the credulous public as homœopathic practice. Again, in acute inflammation of the lungs, highly attenuated doses of nux vomica, or of bryonia, or of phosphorus are administered; but the symptoms become more urgent, and now the case appears to the semi-homœopath "*a suitable" one*, and the patient is scarcely saved by the almost too late recourse to antiphlogistic medicines and "blood-letting." Such, then, is an epitome of the vacillating practice of every man who assumes the double part of a quack and of a regular practitioner.

The man of weak judgment, who is so easily "tickled by a straw and pleased with a feather," is to be pitied and remonstrated with; but, as self-pride and obstinacy are often the concomitants of oblique reasoning powers, he rather adheres to the easy rules of dogmatic medicine, and thus, preferring to continue a homœopath, he ought to be treated as such, and the pity which we formerly felt inclined to bestow upon him must be transferred to his patients. With regard to the other class—the deceptious homœopath—nothing need be said; final self-condemnation and repentance is our worst wish towards him.

In the letter of your anonymous correspondent, the much used phrase, "the homœopathic principle," is prominently introduced. May I ask, if they who so frequently use this term have ever considered its value and its bearings? The principle, *similia similibus curantur*, is, of course, meant; but that can have no meaning, unless accompanied by the necessary infinitesimal doses; for, as diarrhœas cannot be cured by large irritating doses of purgatives, no more can any one disease by large, or even by moderate doses, of any one medicine which is *known* to increase the symptoms of that disease. The infinitesimal system of administering remedies must then be included as a part of "the homœopathic principle;" but infinitesimal doses are opposed to the axiomatic phrase, *similia similibus curantur*, according to its intended acceptation.

Should this letter ever be read by one of the many non-professional dabblers in physic, who glory in exclaiming, "*similia similibus*,"—"like cures like," I would offer to him, with an apology to the profession, one simple illustration of the absurdity of his thoughtless exclamation. Obesity, for example, is a disease; it is induced by good living, but plenty of good roast beef, with port or porter, and little exercise, will cause it; the homœopathic remedy is an infinitesimal dose of that which produced the disease. The patient, accordingly, takes for some time the decillionth part of a grain of animal food, and a drop of porter daily in water—exercise is also ordered. In due time the disease is overcome; the patient becomes thin and pale: he is cured; but has the principle, *similia similibus*, had anything to do in the cure? No, is of course the reply, it was starvation, or, in other words, the withdrawal of the cause of disease. Now, although this is a very simple mode of stating the case, so, when examined, will homœopathic remedies ever be found to act. They of themselves, and when given homœopathically, never did, and never can, cure a disease. The concomitant treatment may, and nature, when thus left to herself, often does; but the cure would more speedily have been effected, had nature been assisted in her efforts by the judicious administration of regular remedies.

The old observed fact of the warmth of the fire relieving, in time, the pain of a burn, is always alluded to by the homœopaths themselves, as an illustration of "the homœopathic principle." Thus, "heat," say they, "produces a scald or a burn, and heat cures it;" but it is an infinitesimal dose of heat that does it in comparison with the force of heat which produced it. Heat is relative, and when a less degree of heat is applied to a burn than that degree which caused it, we are actually applying cold, as every tyro in science is aware of; and thus this boasted homœopathic remedy appears, upon examination, to be actually opposed to "the principle" of this dogmatic and false system of medicine.

Assertions the most unscrupulous are made by homœopaths, and it would seem that the more startling they are, the more readily do some minds receive them, and it might be well if occasionally some one would take the trouble of exposing their falsities; for, remaining uncontradicted, they assume, to the inexperienced, the form of truth.

In "Jähr's Manual of Homœopathic Medicine," under the heading "Iodium," amongst the innumerable symptoms *said* to be produced by iodine, we find more particularly noted, by being placed in italics, "*hard and large goitres.*" Now, after much experience in the administration of iodine, in small doses and in large, from the shortest period of time to the longest, *I defy the medical world to produce one authentic case of goitre caused by the use of iodine.*

In conclusion, I would observe, that I may have appeared somewhat to have diverged in this letter; but, considering the nature of the question, I felt that I could not meet it by a simple negative; and, in objecting to meet in consultation either a homœopath or a semi-homœopath, I feel bound to state, that I merely do so because he professes to treat disease by a system of medicine which, upon examination, I have found to be the most false and inconsistent of any species of quackery that has ever disgraced our Profession.

I have the honour to remain, Sir,

Yours most obediently,

Halifax, June 25, 1850. James Inglis, M.D.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, June 28, 1850.

Beswick, Samuel, Australia.
Drew, George Frederick Augustus, Plymouth.
Hardinge, Francis, Golden-square.
Kent, Jackson Goodenough, Hampton, Middlesex.
Kidd, Richard Driver, Godalming, Surrey.
Marsh, John, Upton-on-Severn, Worcestershire.
M'Sorley, Edward, Newtown Stewart, county Tyrone.
Parkinson, John Herring, Sackville-street, Piccadilly.
Playfair, Charles Edward, Dorset-square.
Purdey, Charles, Southampton.
Thompson, Charles Robert, Westerham, Kent.
Turse, John, Southmolton, Devon.
Wetherell, Benjamin John, Darlington, Durham.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on

Thursday, June 27, 1850.

John Thompson, Cowpen, near Newcastle-on-Tyne.
Crosby Leonard, Bristol.
Henry Briggs, Halifax, Yorkshire.
George Pain, Salisbury.
William Filliber, Wareham, Dorsetshire.
Thomas Andrews Chaldecott, Montague-place.

The College Election.—This important affair was de-

cided yesterday afternoon, in the theatre of the Royal College of Surgeons, in the presence of a large body of the Council and Fellows of the Institution. The President addressed the Fellows on the importance of the object which had drawn them together, pointing out the necessity for electing only those gentlemen who, by their acquirements and position, were calculated to uphold the honour and renown of that establishment; and condemned, in a most emphatic manner, any canvassing, either personally or by letter, for a seat in the Council. In conclusion, Mr. Green read a letter from Mr. Grainger, declining to be put in nomination for a seat in the Council on the present occasion. The Secretary having read those portions of the bye-laws and ordinances relating to elections into the Council, was directed by the President to read the names of those gentlemen next in rotation, commencing from that of Mr. Grainger. Mr. Pilcher's having been called, that gentleman was immediately proposed for re-election by Messrs. Bell, Solly, and Lane. Mr. Perry's was the next name. This gentleman was proposed by Messrs. Soden, Partridge, and Curling. The third was that of Mr. Simpson, who was proposed by Messrs. Kiernan, Tuson, and Wiblin. The names of these gentlemen having been attached to the balloting boxes, the election commenced, and the President declared at the conclusion that the numbers were :—

	Ayes.	Noes.
Mr. Pilcher	74	61
Mr. Perry	60	73
Mr. Simpson . . .	25	108

and declared that Mr. Pilcher was re-elected, and that Messrs. Perry and Simpson were not elected, and, in consequence, the necessity for nominating two more gentlemen, whereupon it appeared from the Chronological List, that Messrs. Mackmurdo and Kiernan were the next in rotation. The former gentleman was proposed by Messrs. Solly, Lonsdale, and Toulmin, and the latter by Messrs. Skey, Hodgson, and Johnson. The balloting having terminated, the President declared these gentlemen duly elected members of the Council; the numbers being: for Mr. Mackmurdo 107 Ayes and 16 Noes, and for Mr. Kiernan 106 Ayes and 16 Noes; the latter gentleman losing one "*Aye*" for proposing Mr. Simpson. It will be perceived, therefore, that the election has fallen on Mr. Pilcher, Mr. Mackmurdo, and Mr. Kiernan. In the evening the Fellows dined together at the Albion Tavern, Mr. Lawrence presiding.

Naval Appointments.—John W. Bowler (1837), to be Superintendent of the Hashemy convict ship; Assistant-Surgeons, George Clarke, M.D., (1846), to the Cuckoo, at Portsmouth; Charles Harper, to the Impregnable, 104, flag-ship, at Devenport; Nicholas Lockyer Dolling (1841), to the Ocean, 80, flag-ship, at Sheerness.

Obituary.—On the 7th instant, at Bologna, Dr. Bromet, F.S.A., late surgeon of H.M. 1st Regiment Life Guards. On the 12th April, at Accra, Western Coast of Africa, aged 31, Frederick Burton Phillipson, Esq., Assistant-Surgeon to the Forces. On the 28th ult., at Holloway, Dr. Carrington, for several years resident medical officer to the Holloway and North Islington Dispensary.

Her Majesty's Levee.—The following members of the profession had the honour of presentation to Her Majesty, at the levee, on Wednesday last:—Dr. Robert Carswell, to receive the honour of knighthood, by Sir James Clark, Bart.; Dr. Charles Hastings, to receive the honour of knighthood, by Lord Lyttelton; Mr. Dalton, R.N., by Sir W. Burnett; Dr. J. Bamfylde Daniell, by Sir J. Clark, Bart.; Mr. Duncan, 12th Regiment, by General Hon. R. Meade; Dr. Maclachlan, Physician to Royal Chelsea Hospital, by Sir C. Halkett; Dr. Thompson, Inspector-General of Hospitals, by the Duke of Richmond; Dr. Verling, by the Marquis of Anglesey; Dr. Wardrop, by the Duke of Norfolk; Mr. J. Wardrop, Grenadier Guards, on appointment, by Colonel Lascelles. The following members of the profession attended the levee:—Dr. Richard Bright, Dr. Lyon Playfair, Dr. Forbes, Dr. Borland, Dr. W. Lloyd, Dr. Burns, K.H., Dr. William Hall, Dr. Field, Dr. Outram, R.N., Dr. Roberts, Dr. Holland, Dr. Stevenson Bushnan.—*Times.*

German Hospital.—According to the annual report, the income of this institution has been sufficient to enable the Committee to pay off a debt of 500*l.*, and to invest 1000*l.* in the 3¼ per Cents. The sum of 1907*l.* 14s. 7d. was subscribed at the anniversary dinner. The in-patients during the year were 474; out-patients, 2895. The income for the year was 2831*l.* 10s. 9d.; the expenditure, 2686*l.* 19s.

At the annual meeting of the Governors of the German Hospital, held on the 27th ult., Mr. Coulson was unanimously elected one of the Consulting Surgeons, in the place of the late Mr. Key.

According to a decision of the Judge of the Westminster County Court, learned and scientific societies, incorporated by Royal Charter, can enforce payment of subscriptions in arrears. The Royal Agricultural Society obtained a verdict to that effect a few days since. As the Royal Medical and Chirurgical Society is a chartered society, this will be a better course for them to pursue, than to gibbet the names of defaulters in their meeting-room.

A new scientific association has been formed recently, under the title of the British Meteorological Society.

Epidemiological Society.—The organisation of this society, for the investigation of epidemic diseases, goes on slowly but steadily. The list of vice-presidents has been filled up, and several gentlemen likely to promote very effectually the important objects of the society, have accepted the invitation of the President (Dr. Babington) to become members of the council. It is expected, that in a very short time the society will be in a position to commence active operations.

Royal Polytechnic Institution.—We have recently paid a visit to this entertaining and truly scientific institution, when we were more than usually delighted with the happy mixture of the amusing and instructive presented to us. With regard to the lectures on the "Philosophy of Scientific Recreation," we must say, that we never saw the principle of "philosophy in sport, science in earnest," more happily illustrated; in fact, the whole aim of the institution seems to be "*miscere utile dulci.*" We know of no place where an evening can be spent at once so profitably and agreeably as at the Polytechnic.

Cholera in Ireland.—A short Parliamentary paper, just published, states the total number of persons attacked by cholera in Ireland, and relieved medically or otherwise by the Boards of Guardians, from Sept. 29, 1848, to March 25, 1850, to be 55,141. The amount of medical, and all other expenses, occasioned by the epidemic for the same period, exclusive of relief to widows, &c., was 35,918*l.* 13s. 10d. Reports were received from 139 Unions, in 28 of which there were not any cases of cholera. There is not any memorandum in the documents relative to the mortality attending the disease, nor do any of the Reports respecting the Unions display the amount of the population; they merely give the number of cases of cholera that occurred; so that it is utterly impossible to estimate the comparative severity and fatality attending the epidemic in the different districts of Ireland.

Spread of Epidemics.—The causes which induce the outbreak and spread of epidemic diseases seem to be widely extended in the different quarters of the world, and wherever the slightest circumstances prevail favourable to their influences, there epidemic disease at once occurs. Cholera is still very prevalent in India among the natives. In Cochin China, it has committed fearful ravages. It broke out last September in the Royal province, and spread rapidly in a northern direction. In the province just named, the lowest mortality was stated to be 20,000; whilst by some it was estimated at 100,000. It is thought the other provinces lost from 10,000 to 15,000 each. The greatest consternation prevailed; the corpses were thrown out into the fields and rivers, in some places actually obstructing the streams; and the dying even were cast out of the houses. The Apollo troop ship, in which cholera was so prevalent and so fatal some time since, on her return from China with the 95th regiment on board, was obliged to put in at Simon'stown, and billet in the naval yard, dysentery having broken out among the soldiers, 45 of whom have died in consequence. The vessel was overcrowded. The whole ship was, for a long period, like an hospital, as many as 100 and 150 being sick at a time with dysentery. Six men of those ill when landed at Simons'town have since died, and it is probable more will perish ere this ill-fated ship will reach England. All the sick, however, will be left behind. The Apollo has not sufficient height between decks, and is otherwise ill-adapted for the conveyance of troops. Gastro-enteritis is said to be prevalent in an epidemic form at Malta. When

fatal, it carries off the person attacked in from three to five hours. In several of the West India Islands, and in the more southern districts of the United States' epidemic cholera is still prevalent.

Sir Robert Peel.—While, in common with the public at large, we feel the deepest regret at the fearful calamity which has deprived the empire of the most skilful statesman of the present day, we cannot allow the occasion to pass by without commenting on the singular prejudices which have influenced his relatives in refusing permission to the surgeons to examine the body, by which the cause of death might be discovered. Sir Robert was thrown from his horse, and suffered severe and fatal injuries, the only one of which detected before death was a comminuted fracture of the clavicle. So severe was the agony he suffered, that he could not bear the slightest surgical examination. After his decease, a fracture of the fifth rib was ascertained to exist; but the cause of the severe bodily suffering, and of the fatal termination of the accident, remains still unascertained, because the family will not allow a *post-mortem* examination. We are far from being willing unnecessarily to intrude on the grief of relatives suffering from so sad a calamity; but, under such circumstances, for the sacred cause of humanity, we are bound to say the request should have been conceded; for the information gained by the inspection of Sir R. Peel's remains might guide the surgeon to the successful treatment of all such accidents in future. We earnestly and sincerely hope that the consent of the relatives may yet be obtained to this most necessary step.

Death from Chloroform.—A policeman, named Alex. Scott, aged 34, died a few days since, in Guy's Hospital, in consequence of the inhalation of chloroform, prior to amputation of the finger. Mr. Cock, the operator, said, at the inquest, that in many cases where chloroform had been used, he had waited with breathless anxiety for the recovery of the patient from its influence. The public ought to know the great danger of using it, and he strongly objected to its administration under any circumstances. An Edinburgh surgeon, in a letter published in the *Times*, attributes the fatal results, in all these cases, to impurities in the chloroform.

Derby Lunatic Asylum.—Dr. Hitchman, of Hanwell Lunatic Asylum, has just been appointed superintendent-physician to the Derby County Asylum.

Norwich Hospital.—The vacancy in the surgeoncy to this hospital, caused by the decease of the late Dr. Crosse, will, it seems, be sharply contested. There are already six or seven candidates in the field, for either the surgeoncy or the assistant-surgeoncy, the latter being vacant if the present assistant-surgeon be elected surgeon. Mr. Nichols is a candidate for the surgeoncy, and, in reply to a charge alleging that he is acting contrary to the courtesy and etiquette of the profession, according to which the assistant-surgeon to an hospital generally succeeds to a vacant surgeoncy, alleges, that when Mr. Firth was elected assistant-surgeon it was understood that he was not, on that account, necessarily to become one of the surgeons in case of a vacancy. Meanwhile, a dirty attempt has been made, in the shape of an advertisement, signed "A Governor," to disparage Mr. Firth's qualifications, on the plea that his testimonial is signed by two of the surgeons only, and not by the whole professional staff of the hospital. We know none of the parties who are candidates, but we cannot help denouncing this proceeding as disgraceful to its concoctor. The candidates for the assistant-surgeoncy are Mr. T. W. Crosse, son of the deceased surgeon, Mr. Ballard Pitt, Mr. Gibson, and Mr. Webber. The election takes place on the 6th inst. The present medical officers are:—Dr. Lewis Evans, Dr. R. Hull, and Dr. Tawke, physicians; Mr. Norgate and Mr. Dalrymple, surgeons; Mr. G. W. W. Firth, assistant-surgeon.

HEALTH OF LONDON DURING THE WEEK.

In the week ending last Saturday, 965 deaths were registered in London. The increase on the return of the previous week, when only 775 deaths occurred, arises not from an increased rate of mortality, but from an influx of cases which had been the subjects of Coroner's Inquests at various periods in the last three months, but were not registered till the end of the quarter. The corrected average for 10 corresponding weeks in 1840—9, is 994; compared with which the deaths of last week exhibit a decrease of 29. Ten persons, of whom 9 were children, died of small-pox, 17 of measles, 14 of scarlatina, 19 of hooping-cough, and 34 of typhus; all of these epidemics showing much less than the usual mortality, except the last, which differs little from the average. But diarrhœa shows a considerable increase; in the last three weeks the fatal cases have run thus,—17, 18, and 33. Two deaths from cholera were registered:—On June 25, at 4, Princes-street, Cripplegate, a porter, aged 38 years, died of "acute rheumatism (10 days), cholera (3 days)." The deceased had a severe attack of cholera in August last, and since that time his health had not been good. On June 28, at 23, Windmill-row, the wife of a labourer, aged 54 years, died of "bilious cholera (45 hours.)" The certificate adds, that "there was no purging in this case." Mr. Mears, the registrar, when cholera prevailed last year, described this row as in a filthy condition, and singularly adapted to generate disease.

MORTALITY TABLE.

Deaths in the week ending Saturday, June 29, 1850.

(Metropolis.)

Causes of Death.	June 29.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	369	374	212	965	9105
Specified Causes	367	374	211	953	9045
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	115	27	16	158	1965
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	2	20	12	34	498
Tubercular Diseases	43	115	14	172	1839
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	62	31	35	128	1166
Diseases of the Heart and Blood-vessels	1	31	14	46	256
Diseases of the Lungs, and of the other Organs of Respiration	36	21	34	91	861
Diseases of the Stomach, Liver, and other Organs of Digestion	21	21	17	59	647
Diseases of the Kidneys, &c.	...	7	5	12	76
Childbirth, Diseases of the Uterus, &c.	...	9	1	10	101
Rheumatism, Diseases of the Bones, Joints, &c.	...	9	1	10	75
Diseases of the Skin, Cellular Tissue, &c.	2	1	...	3	12
Malformations	3	...	...	3	16
Premature Birth and Debility	19	1	...	20	221
Atrophy	20	...	3	23	141
Age	...	...	32	32	424
Sudden	9	14	14	37	230
Violence, Privation, Cold, and Intemperance	34	67	13	115	517
Causes not Specified	2	...	1	12	60

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	June 29, 1850.	Sum of Ten Weeks.
London...	1948369	965	9105
West	301189	165	1408
North	376568	200	1762
Central...	374199	164	1683
East	393067	201	1927
South	503346	235	2325

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	28	Heart	41	Phthisis.....	132
Bronchitis	39	Hooping-cough ...	19	Pneumonia	35
Cholera	2	Hydrocephalus ...	26	Scarlatina	14
Childbirth	6	Influenza	1	Small-pox	10
Convulsions	39	Liver	4	Stomach	5
Diarrhœa	33	Lungs	6	Teething	6
Dropsy	15	Measles	17	Typhus	33
Erysipelas	6	Paralysis	28	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	748	536	212
Females	699	429	270
Total.....	1447	965	482

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·120	67·7	57·0	+ 7.4	W.	N.N.E.	Miles. 25	0·60	Slightly P. at 8 p.m., nothing shown at any other observation.
Monday.....	30·096	69·4	58·0	+ 9·2	E.	E.	55	0·00	Slightly Positive at 9 p.m., nothing shown at any other time.
Tuesday.....	29·980	69·1	55·4	+ 9·1	E.	E. & E. by S.	70	0·00	Nothing shown throughout the day.
Wednesday.	29·769	66·8	58·2	+ 7·1	E.	E.	75	0·00	Nothing shown throughout the day.
Thursday ...	29·980	59·2	51·3	— 0·3	N.E.	N.E.	100	0·37	Nothing shown throughout the day.
Friday	29·600	59·6	58·5	— 0·0	E.N.E.	E.N.E. & E.	50	0·15	N. electricity with strong tension was exhibited at 9 p.m., nothing shown at any other time.
Saturday ...	29·669	57·9	49·2	— 1·8	N.W.	W.	135	0·10	Positive electricity with weak tension at 9 p.m., nothing shown at any other time.
Means ...	29·888	64·2	55·4	+ 4·4	N.N.E.		SUM 510	SUM 0·62	

*In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Our friends must pardon us if we condense many communications into the form of answers to Correspondents, or give them insertion in the columns generally devoted to that purpose. For letters of interest to the Profession generally, we always endeavour to find a place; but those which are entirely of a personal character must be noticed or replied to in our Column to Correspondents, and that as briefly as possible.

We have to request, that communications intended for the editorial department of this Journal, be addressed neither to the publisher nor to the printer; neither to Dr. this, nor to Mr. that; but directly to the Editor of the "Medical Times," care of Mr. Churchill, Medical Publisher, 46, Princes-street, Soho, London.

We have also to beg that letters concerning the supply of the Journal, advertisements, and other commercial matters, be addressed, not to the Editor, but to the Publisher.

Our Table of the last Half-year's Mortality, &c., with explanatory Text, will appear next week.

We have, on the part of the Proprietors, to thank many correspondents for the approbation they have expressed regarding the changes which now take place in the New Series of the "Medical Times." For ourselves, also, we have to acknowledge with thankfulness the suggestions several valued friends have offered to us, concerning improvements they think may be effected in the editorial department. To these we will give our most earnest attention; and if it be possible to comply with what our friends point out to us as likely to be improvements, and acceptable to the profession, we shall gladly attend to wishes so kindly intimated.

Mr. Syme's "Challenge."—Surely our correspondent did not believe that, when Mr. Syme made his Quixotic "challenge," he supposed any one would notice it seriously, still less accept it.

A Young Microscopist must rest assured that he will not succeed in the use of the microscope without great patience and much perseverance. We are not surprised that he cannot determine the shape of the "red particles," since they have been described as "spherical," "oval," "lenticular," "annular," "flat, with round cases," or "altogether irregular." The general opinion is that they are spherical; and really it matters little what they are. Dr. Milligan says, they have been compared "to a globe, to a bladder with a pea in it, to a piece of money, to a drum, to a candlestick, to a hexaedron, and I know not what."

Mr. Rawlinson requests our advice under the following circumstances:—He was called to a case of fracture of the leg, and was promised by the overseer that he would send him the order. He accordingly reduced the fracture, and attended to the case until a cure was effected, applying occasionally for the order, but without receiving it. On his charging the Board of Guardians the proper fee of £3, they refused to pay, on the ground that he attended without an order, an objection which Mr. Rawlinson considers hardly valid, as he would have been liable to censure, had he not taken charge of the case, if anything untoward had happened. To Mr. Rawlinson's question, "Can he obtain the amount of the demand by sueing the Board in the County Court?" we answer, "No;" he has no legal *locus standi*, inasmuch as he did not obtain the medical order from the overseer. His only remedy is to apply to the Poor-law Commission, stating clearly all the facts of his case. An inquiry will be instituted, and, if he can prove his position, an order for payment of the fee will be issued by the Commissioner. In cases of accident a union surgeon can, and ought to attend at once, without waiting for the order, but he must, as soon as possible afterwards, report the case to the Board of Guardians. In all matters of dispute between the Board of Guardians and the medical officer, the Poor-law Commission should be appealed to.

Mr. Johnson.—Declined with thanks.

[To the Editor of the Medical Times.]

Sir,—Your information on "Ireland" is in general so correct and concise, that I make bold to trouble you with one or two questions on the all important Medical Charities Bill, now going through the Committee in London,—first, whether it will affect Grand Juries, now about to sit at the ensuing assizes; and next, whether it will be peremptory for all dispensaries to be under the new Act? Your suggestion of enlarging the Board of Health, or doing away with it, has much influence with those in power, and is likely to be followed up; in fact, the general stand your journal has taken for Irish medical affairs recently, must have the best effect; and under the present publisher, Mr. Churchill (in addition to the benefit bestowed by his Manuals), become exceedingly popular in this country.

Belturbet, June 22, 1850. G. S. A.

*** 1. The Irish Medical Charities Bill being still merely in its *chrysalis* condition in Committee cannot affect presentments now about to be looked for. The Grand Jury will have nothing whatever to do with it. 2. As to the second question of our Correspondent, we apprehend it will not be peremptory for *all* dispensaries to be under the new Act; as the latter Act, however, virtually repeals the old Grand Jury clauses, it will be, we fear, something very like peremptory for all dispensaries trying to be supported by public grant, to be under it. We have watched the Bill, as one of the greatest possible importance to our brethren of the Irish portion of the profession, and in everything we have urged on those in power, have studied the welfare of the poor and of the profession,—in no way dissociated, we are happy to learn, in that portion of the empire.

M. R.—Thanks for the hint. We shall avail ourselves of it ere long. We are glad to find that the proposed alterations give satisfaction. We have many more names to add to our list of contributors, and papers of very great intrinsic value have been promised. Our readers may feel assured we will do our utmost to ensure this journal's maintaining the high position it has already attained in medical literature.

Mr. Campbell.—Our correspondent's services show that he is morally entitled, health permitting, to demand full pay, and to be called into active service, but we believe that the rules of both arms, the military as well as the naval, require that the junior officers of equal rank be called upon before their seniors, as being more likely to be permanently serviceable. We fear that Mr. Campbell has no remedy, but must wait the will and pleasure of the authorities. A court-martial is entirely out of the question, as he (*Mr. C.*) is not, at present, engaged in actual service. We are much obliged by the promise contained in our correspondent's note, and shall be happy to receive the contributions he promises. Medical military services, rendered in almost every quarter of the globe, must have afforded a large amount of practical experience, the result of which we shall be happy to make known to the profession by the medium of our columns.

Mr. Clark, Surgeon to the Bristol Infirmary, and Lecturer in the Medical School, is thanked for his kind and acceptable letter.

S. F. must apply to his hair-dresser, or consult that very useful publication, "Beasley's Druggists' Receipt-book."

M.R.C.S.—Dr. Rigby's publication.

We very much regret that want of space will not allow us to publish the excellent Report presented by the Committee of the South-Eastern Branch of the Provincial Medical and Surgical Association, at the meeting at Guildford, on Wednesday, the 26th instant, and resolved to be printed and taken into consideration at a special general meeting of the members of the branch, at one o'clock, on Wednesday, the 10th July, at the Town-hall, Reigate.

The Railway Accident Bill.—We have read a long and very full account of the debate in the House of Commons on the second reading of this Bill, of which we would willingly have availed ourselves had our space admitted. It seems most extraordinary, that the collective wisdom of the country, after hearing the facts detailed which led to the introduction of this Bill, could have rejected it by a tolerably large majority. The fact can only be explained by the recollection, that a large proportion of the House are railway directors and shareholders, and medical men have no real representative in the third estate. It was defeated by a majority of 55. The Attorney-General said, "He thought medical men would willingly, on being sent for, render their services to a sufferer, even though they had no power of recovering payment from the Company, being assured he would pay them if he were able; and, if he were unable to do so, having the certainty of remuneration, if he were an honest man, on his recovering damages." Just so; the surgeon is to be the scape-goat; our willingness to render professional assistance when called upon is taken advantage of, to rob us on every feasible occasion. Shame on such lawgivers!

ORIGINAL LECTURES.

LECTURES

ON

THE CHEMISTRY OF THE POISONS.

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LECTURE XVII.

Compounds of the Mineral Acids.—1st. Nitro-Sulphuric Acid, its Preparation: Phenomena resulting from; Composition of the Acid; Schönbein's Views.—Properties of the Acid: its Action on Metals, Metalloids, Sugar, Manna, Glycerine, Starch, Flour, Cotton, Wood, &c.—General Properties of these Explosive Bodies.—Action of the Acid on Animal Substances.—Tests for the Acid.—2nd. *Aqua regia*: its Manufacture and Properties; its Action on Metals, Metalloids, Vegetable and Animal Substances, &c.—Opinions regarding its Constitution and *Modus Operandi*.—Tests for the Acid, &c.

When *aqua fortis* is mixed with sulphuric or with nitric acid, it forms corrosive poisonous compounds which are of great interest to the medical jurist; for the first of these mixtures is not unfrequently in the hands of the public, as an agent for the fabrication of gun-cotton, and the second is very commonly employed under the name of *aqua regia*, as a solvent for the noble metals. It is proper, therefore, that we should direct a little attention to the leading chemical properties of these acid liquids.

NITRO-SULPHURIC ACID,

Called also *sulphuro-nitric acid*, is a mixture of strong aqua-fortis and oil of vitriol. That which is usually employed for the manufacture of gun-cotton consists of about two parts by measure of the strongest sulphuric acid, (sp. gr. 1850,) and one of the concentrated fuming nitric acid, (sp. gr. about 1450.)

The phenomena which result from the combination of these acids vary with the strength of the liquids. You will find, for instance, that, when you employ the red fuming aqua fortis, and mix it with the strongest Nordhausen vitriol, that very little heat is developed, and that a greater or less quantity of white crystals are produced. According to Rose, these crystals consist of sulphuric acid and binoxide of nitrogen. If, however, the ordinary kinds of vitriol and nitric acid are employed, the reactions are not remarkable, though there is always some elevation of temperature, and chemists are generally disposed to think that little or no chemical change is effected in the mixture. The researches of Schönbein have, however, led him to believe that two new compounds are formed in the liquid: one of these is the bisulphate of the binoxide already referred to, and the other is a peroxide of hydrogen. The nature of these opinions may, perhaps, be represented by the following equation:—

$$2(SO_3 + HO) + (NO_5 + HO) = (2SO_3 + NO_2) + 3HO^2.$$

By adopting this view of the matter, Schönbein was led to discover that nitro-sulphuric acid would oxidise far more powerfully than either nitric or sulphuric acid alone; and he came to the conclusion, that this acid mixture behaved towards bodies as a kind of *aqua regia*, in which chlorine is replaced by peroxide of hydrogen. This hypothesis is, to a certain extent, borne out by the fact, that nitro-sulphuric acid does, in most cases, exhibit a strong disposition to part with oxygen; and, having done so, the residual liquid behaves exactly like a solution of Rose's sulphate of nitric oxide in oil of vitriol; for, on diluting it with water, it effervesces more or less rapidly, evolves binoxide of nitrogen, and frequently assumes a blue or a green colour.

PROPERTIES OF NITRO-SULPHURIC ACID.

1st. *Its Physical Properties.*—When recently made, the liquid looks like oil of vitriol; it is heavy and colourless; it evolves dense white fumes of nitric acid, and perhaps of some other oxide,—for the vapours attack the colour of litmus, and give a deep blue tint to paper moistened with tincture of guaiacum, or with starch and iodide of potassium. The specific gravity of the fluid is always greater than the mean of the two acids employed in its preparation. That which is usually met with has a density somewhere about 1600.

2nd. *Chemical Properties of the Liquid.*—It has a great affinity for water, and, like pure sulphuric acid, will produce great heat when it is mixed therewith. Exposed to the air, it absorbs moisture and becomes weaker; and when it is made to act on organic bodies, it generally abstracts water, or the elements of water, and so helps to decompose them.

The *ordinary metals*, as zinc, tin, copper, lead, and iron, are not attacked by the strong acid in the cold state, but they are readily and violently oxidised by the liquid when it is heated, or when it is diluted with water; and among the products of the action are nitrous acid, binoxide of nitrogen, hydrogen, and ammonia.

The *metalloids*, as *sulphur*, *selenium*, *phosphorus*, *iodine*, &c., are also acted on with considerable energy. The first of these gives rise to the formation of several sulphur acids, one of which, sulphurous acid, often escapes with much frothing; and, if the acid liquor be very strong, and the sulphur used in excess, the residual fluid frequently assumes a deep indigo blue colour, which persists for some time after cooling. Selenium and phosphorus gradually dissolve in the cold acid without any evolution of gas, and with the formation of selenic and phosphoric acids. In the case of iodine, a part of the iodic acid is gradually precipitated from the liquor in combination with sulphuric acid, and it presents itself in the form of a yellow powder.

The action of the liquid on *organic substances* is also very peculiar; for in some cases it produces a most violent reaction, accompanied by the evolution of dense red fumes; while in others the changes are brought about in a much quieter way, and compounds result which are all more or less explosive.

With *white cane sugar*, the strong acid does not at first appear to exert any peculiar action, for the sugar remains white and insoluble; but gradually it becomes brown, and dissolves into a thin, transparent mass, which, on stirring, rapidly acquires consistence, and then separates from the liquid in the form of a thick, resinous solid. If the acid is very strong, not a trace of gas is evolved during the whole of the operation, and there is but a slight elevation of temperature. The substance thus formed is very peculiar in its properties; and, when kneaded in warm water until it has lost all acid reaction, it exhibits the following characters:—It is void of colour and of smell, has a faint bitter taste, is hard and brittle in the cold, though it may be rolled into forms at the ordinary temperatures, and it then acquires a silver colour and a beautiful silky lustre. It becomes soft and adhesive between the fingers, and may be drawn out into fine threads. When it is cautiously heated in an open vessel to melting, it disengages aqueous vapour only; and if it be allowed to cool when it ceases to give off water, it sets into a hard, colourless, transparent mass. If the application of heat be continued, it puffs up, gives off red vapours, and soon explodes, like gunpowder, leaving but a slight trace of ash. It is perfectly insoluble in cold water, in which it sinks; but it melts in boiling water, and is gradually dissolved therein, communicating to the liquid a very bitter taste. On heating the brown mass, it puffs up and then explodes. This substance dissolves in all proportions in ether, alcohol, and the fatty oils. Boiled with a weak solution of carbonate of soda or potash, and then dried and fused at a heat below 235° Fahr., it has been used by Mr. Lewis Thompson for fuses and rockets. Weaker nitro-sulphuric acid, or the strong acid when heated, acts more violently on saccharine matters, and evolves dense fumes of nitrous acid and binoxide of nitrogen.

Manna is also acted on by this acid, as well as by aqua fortis, and converted into a compound which is highly explosive. Like the preceding, it is but slightly soluble in water, though it dissolves very readily in acids, alkalies, alcohol, and ether. The alcoholic solution of it is decomposed by most of the commoner metals; iron acts on it very readily, and gives rise to the formation of a volatile ether. The composition of explosive mannite is very constant; so much so that Kopp has resorted to it as a means of determining the atomic weight of its saccharine element. According to Stenhouse, it consists of $C_{12}\ H_9\ O_7 + 5\ NO_5$; that is, of mannite $C_{12}\ H_{14}\ O_{12}$, from which five equivalents of water have been abstracted, and five of nitric acid substituted. This compound is so exceedingly explosive when it

is struck, that M. Sobreno has proposed to use it under the name of fulminating mannite, for the manufacture of percussion caps.

Glycerine, the sweet principle from fats, is attacked with great energy at ordinary temperatures, by nitro-sulphuric acid; but, if the mixture be effected at a low temperature, the glycerine quietly dissolves; and, on pouring the solution into water, a heavy oily liquid separates, which has a sweet taste, a pungent odour, and, as is believed, a very poisonous action. This oily matter is soluble in alcohol and ether, from which it is again precipitated on the addition of water.

Starch.—The strong acid liquid does not exert any visible action on farinaceous matters, though it forms a white pulverulent solid, which is highly explosive. The weak acids gelatinise starch, and convert it into a gummy mass, from which water precipitates a white powder that is identical in composition and properties with Braconnot's *xyloidine*. Should the starchy matter contain any glutin or other albuminous substance, as is the case with ordinary flour, the acid then communicates to it a citron yellow colour.

Cotton or *linen cloth* does not, at first sight, appear to be acted on by strong nitro-sulphuric acid; but, on examination, it will be found, that the tissue has increased from 70 to 75 per cent. in weight, and has become highly explosive. In the year 1846 Schönbein directed attention to this fact, and he introduced the product to our notice under the name of *gun-cotton*. When properly prepared, it is rather rough or crisp to the feel; it is highly electrical when rubbed, and it explodes when it is sharply struck between two hard surfaces. On being heated it presents several remarkable phenomena; for example, it first loses water, and then, as it approaches the temperature of 212° Fahr., it begins to decompose, and to evolve acid fumes: kept for a long time at this heat, it acquires a yellow colour, and sometimes it fires unexpectedly; at other times it loses so much oxygen, that it burns slowly like tinder. Schönbein states, that it explodes at a heat of 440° of Fahr.; but others have remarked that it fires at a much lower temperature, and I believe that the late fatal accident at Faversham was an illustration in proof of this opinion. Vankerckuoff says, that, although gun-cotton may be heated *slowly* to the temperature 356° Fahr., or even to that of 392°, without exploding; yet, if the heat be applied suddenly, it fires at a temperature of 270° Fahr. Marx also asserts, that the recently made cotton fires at a temperature of 144°, or on an average at 199°, when it is heated to this point in five minutes. In the act of exploding, gun-cotton produces a great quantity of gas,—about one cubic inch for every half grain of it. This gas consists of various deleterious agents; among which are carbonic oxide, carbonic acid, nitrogen, binoxide of nitrogen, and cyanogen. The relative proportions of these, in every 100 cubic inches of the evolved gas are, according to Messrs. Porrett and Teschemacher, as follow: — Carbonic oxide 35·7, carbonic acid 14·3, nitrogen 7·1, binoxide of nitrogen 35·7, and cyanogen 7·1. The presence of the last-named compound among the products has been confirmed by the later investigations of Fordos and Gelis.

Gun-cotton is perfectly insoluble in water, in the cold acids, in alcohol, and in ether, though it is readily dissolved by the acetic ethers of wood spirit, and alcohol. It dissolves also in hot sulphuric acid. This takes place without darkening, and with the evolution of nitric oxide. Liquor potassæ discolours the tissue, and, on heating the liquid, it dissolves it, producing a solution from which sulphuric acid evolves binoxide of nitrogen and nitrous acid.

The composition of gun-cotton has been variously estimated. Gladstone asserts, that it consists of C_{24}, H_{15}, O_{40}, N_5,—a formula, which agrees very closely with those given by Ransome and Pelouse.

When strong nitro-sulphuric acid is poured over a large quantity of cotton, the latter, from its being in excess and out of the liquid, frequently takes fire, and evolves dense fumes of nitrous acid, &c. A weak acid is apt to gelatinise the cotton, or else it altogether fails to act upon it.

Wood, tow, and other ligneous matters containing resins, are rendered of a dark colour by the acid; much of this, however, is removed by subsequent washing; and the residue behaves like *pyroxiline*, or weak gun-cotton.

Most of the *hydrocarbons* are attacked with great energy by it. The volatile oils, for example, are instantly decomposed by it, and the change is accompanied with violent effervescence, and often with so much heat that the evolved gases are fired. Cahours has made some inquiries into the nature of these changes, and he concludes that the acid generally gives rise to the formation of definite compounds, which contain more hyponitric, or, as it is generally termed, nitrous acid (NO^4), than those which result from the action of aqua fortis alone. In the various compounds which he investigated, he found that the introduction of a molecule of nitrogen was constantly accompanied by the elimination of an atom of hydrogen; and he believes that, in the reaction, water and hyponitric acid are produced, the former being rejected by the organic group, and the latter retained by it.

Action of the Acid on Animal Substances.—Liquid albumen is instantly coagulated and made yellow by the acid; but weaker solutions are not so quickly discoloured. The mucous membrane is first whitened and then converted into a yellow compound. Cuticle, wool, and most other dry animal substances, are instantly attacked by the acid—they are made yellow, evolve binoxide of nitrogen, and frequently the animal substance is dissolved, or else it is converted into a rotten pulpy mass.

THE TESTS FOR THE ACID.

These have already been enumerated; in fact, you must seek for the presence of sulphuric acid and aqua fortis. The one is easily recognised by a salt of baryta, and the other by a solution of protosulphate of iron, or by a few copper filings. If the acid be submitted to distillation, all, or nearly all, the aqua fortis will first distil over, leaving the oil of vitriol in almost a pure state. If, however, the liquid has been made to act on any oxidisable body, then three products will result from the distillation, viz., nitric acid, sulphuric acid, and Rose's sulphate of the binoxide, which remains last in the still. The presence of this compound is known by the evolution of nitric oxide, when the liquid is diluted with water. Again: we may determine the proportions of sulphuric and nitric acids present by allowing a given quantity of the diluted liquid to act on carbonate of lead or carbonate of baryta, taking care that the latter are in excess. The acids will react on these bases, and form nitrate and sulphate; the former, being soluble in water, is to be separated by filtration, then evaporated to dryness and weighed; every 131 grs. of nitrate of baryta, or 166 of nitrate of lead, indicate 63 grs. of the strongest nitric acid. The undissolved residue, consisting of carbonate and sulphate, is to be treated with dilute nitric acid until effervescence ceases, and then filtered. By this means the excess of carbonate will be removed. The residual sulphate, when dried and weighed, indicates the proportion of oil of vitriol present: for every 117 grs. of the barytic salt, or 152 of the lead product, represent 49 grs of monohydrated sulphuric acid.

In a case of poisoning by nitro-sulphuric acid, you would expect to find that its action on the tissues of the alimentary canal would be very similar to those which result from the administration of *aqua fortis;* and, in seeking for the poisons, you would resort to the processes already given for the detection of nitric and sulphuric acids. Let me remind you, moreover, that you are to search for these acids in the urine voided by the patient.

AQUA REGIA, OR NITRO-MURIATIC ACID.

This acid is usually prepared by mixing together two or three parts, by measure, of muriatic acid, and one of nitric, or by dissolving a metallic chloride in aqua fortis.

Physical Properties of the Acid.—When fresh made, the liquid commonly has a faint yellow colour; if, however, the nitric acid employed in its fabrication, have a density above 1400, or if the mixture have been kept for a few days, or have been exposed, even for a few minutes, to a boiling heat, then the resulting compound possesses a deep orange-red tint, and it evolves the mixed vapours of chlorine and nitrous acid. The liquid fumes slightly in the air; it has a pungent, suffocating odour; it boils, or is decomposed, at a temperature a little below that of boiling water; and its density is somewhere about the mean of the acids employed in its manufacture.

Chemical Properties of Aqua regia.—The liquid is constantly undergoing change, in consequence of the reaction of the hydrogen of one acid on the oxygen of the other; by which means chlorine and nitrous acid are liberated. In a close vessel, this decomposition and separation of chlorine are arrested as soon as the liquid is saturated with the gas; but in an

open vessel, from which the chlorine can escape as fast as it is evolved, the action continues until either the whole of the nitric acid, or the whole of the hydrochloric acid is decomposed. Aqua regia does not exhibit much affinity for water, for it may be mixed therewith without producing any great elevation of temperature. The acid is a powerful oxidising agent, and it also exerts a strong action on those substances which have a disposition to combine with chlorine. It is, on this account, a powerful solvent for most metallic substances.

Phosphorus, sulphur, selenium, and iodine, are soon brought by it into their highest state of oxidation.

The metals also are readily attacked by it even in the cold, but the action is much more violent when the liquid is made hot. Those metals which have a great affinity for oxygen,—as, for example, the common metals,—are quickly dissolved by it, and they cause the evolution of nitric oxide only; but, if the metal employed is one which has a weak affinity for oxygen,—as, for instance, gold, platinum, iridium, or osmium,—then the solution is not effected so rapidly, and orange-coloured fumes of chlorine and binoxide are simultaneously produced. With regard to the changes which take place during these reactions, there appears to be some doubt. Berthollet, Sir Humphrey Davy, Berzelius, and, in fact, most chemists, have, up to within the last ten or fifteen years, been disposed to think that the potency of the liquid is entirely dependent on the presence of *free* chlorine. In 1831, however, Mr. Edmund Davy published a memoir on this subject, and he therein endeavoured to show, that the active properties of *aqua regia* were due to the presence of a peculiar gas, which he called *chloro-nitrous acid*, from the circumstance of its being composed of equal volumes of chlorine and nitric oxide. Baudrimont, in 1843, re-examined the subject; he collected this gas and condensed it, by means of water, into a deep red liquid, which, he says, had all the properties of aqua regia, excepting that it appeared to be without action on phosphorus. According to Baudrimont, it consists of two equivalents of chlorine and one of hypo-nitrous acid, ($Cl^2 + NO^3$,) so that it might be regarded as a nitric acid, in which two equivalents of oxygen are displaced by two of chlorine; hence he named it *chloro-nitric acid*. He states, that the compound does not combine immediately with metallic oxides, but that, by double decomposition, it gives rise to a chloride and a nitrate. Moreover, he informs us, that it does not redden litmus unless water is present, but that it bleaches the test. Gay-Lussac has subsequently investigated this matter, and he is of opinion, that the gases evolved from the acid in question are mixtures, in various proportions, of chlorine, and two chlorinated compounds; one of these he named *hypo-chloro-nitric acid*. ($NO^2 Cl^2$,) and the other *chloro-nitrous acid*. ($NO^2 Cl$.) Both of these compounds are, according to the last-named author, instantly decomposed by water, and resolved into hydro-chloric acid and the products of hypo-nitric acid, but he states, that they are not necessary to the solvent power of the acid. It may, says Gay-Lussac, be generally asserted, that the gaseous products furnished by the metals with *aqua regia*, excepting gold, platinum, &c., are precisely the same as they yield with nitric acid. With respect to gold, it is not attacked by nitric acid; and the gaseous products (chlorine and chloro-nitric vapour) which it furnishes with *aqua regia*, are independent of its presence, and are determined solely by the reaction between the nitric and the hydrochloric acids.

Action of the Acid on Organic Substances.—Most vegetable substances are rapidly attacked by this acid; and, when they are heated therewith, they become oxidised, evolve binoxide of nitrogen, carbonic acid, &c., and leave behind a product which contains oxalic acid. Wood, and other matters which contain resin, are quickly darkened by the liquid.

Albumen is instantly coagulated by it; and, if the solutions be strong, the coagulum assumes a deep yellow tint. The concentrated acid also coagulates, and then discolours, the dead mucous membrane, the cuticle, wool, hair, &c. When animal matters, as flesh, &c., are boiled with *aqua regia*, they are soon dissolved; the liquid froths very much, evolves red fumes, and then becomes clear and almost colourless. This property of rapidly dissolving animal substances has been taken advantage of as a means of breaking up those tissues which are suspected to contain a mineral poison. This fact was made the subject of inquiry at the trial of Professor Webster for the murder of Dr. Parkman.

The tests for aqua regia are founded on the property which this acid has of dissolving the noble metals, of evolving chlorine and binoxide of nitrogen, and of bleaching a solution of indigo; but you are to remember, that, if the acid has been exposed for some time to the air, or has been submitted to prolonged ebullition in an open vessel, it then loses every one of these properties; under such circumstances, you are to search in the liquid for some low oxide of nitrogen. The proportions of the two acids present may be estimated by neutralising a known quantity of it with recently-ignited carbonate of soda, then precipitating with an acid solution of silver. By means of the second operation, the amount of muriatic acid present is estimated; and, as its equivalent of soda is easily ascertained, you have only to deduct it from the total amount of alkaline carbonates employed, and the residue will indicate the proportion of aqua fortis present.

In cases of poisoning by this liquid, you will expect to find the mucous membrane of the mouth, gullet, and stomach acted upon as if nitric acid had been swallowed; and should the acid have fallen upon any coloured garment, you will be sure to find that the dye is discharged, and, in the case of animal fabrics, that a yellow spot remains in its place.

I have dwelt rather long on the consideration of these two corrosive acid poisons, not so much because they are the subjects of frequent examination, but because they are not at the present time very fully discussed in any of our leading chemical or medico-legal works. In our next lecture, we shall commence an inquiry into the properties of the phosphorous compounds.

ORIGINAL COMMUNICATIONS.

CELLULAR TUMOUR OF THE LABIUM PUDENDUM REMOVED

By E. A. LLOYD, Esq.,
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[The case reported by H. HENDERSON, Esq., House-Surgeon.]

The patient, Sarah Holland, is a native of St. Christopher, aged 28, of European father and dark mother. She is a delicate woman, of a very nervous temperament, and has the flattened nose and that peculiar countenance which characterise the dark race. She was admitted into Lucas Ward on January 24th, 1850, when she stated that the tumour commenced about fourteen years ago, at which time she perceived a very small swelling, with induration in the right groin, very near the labium externum. This swelling gradually but slowly increased in size for about nine years, and after that time the increase of the tumour was much more rapid, till latterly it caused her so much inconvenience, that she determined on coming to England for the purpose of having it removed, as she was told that this climate would be much more favourable for her recovery after the opera-

tion, than that of the West Indies. During the voyage she suffered very much from sea sickness, and on her arrival in England the tumour was found to have become considerably diminished in size.

On admission, she had a pendulous tumour of a pyriform shape, the neck of which extended from the right labium externum to the anterior superior spine of the ilium on the same side, the bulk of the tumour hanging down in front of the thigh. It was about a foot in length, and measured 22 inches in circumference at the largest part. It did not impede any function, and the organs of generation were perfectly healthy. The skin which formed the surface of the swelling was of the natural colour, but the sebaceous follicles were greatly enlarged. The tumour seemed to be quite unconnected with the cavity of the abdomen, except at one part of the neck, where something like a hard cord was felt, (which was afterwards found to be an enlarged lymphatic gland.) There was no impulse on coughing, nor any other symptom to induce the belief that there was any communication between the tumour and the abdominal cavity.

She had never suffered any actual pain in the tumour itself, although the weight of the mass caused her some uneasiness whenever she stood up or walked, so that she was obliged to keep it continually suspended.

The tumour was removed on February 22nd, in the following manner:—After the administration of chloroform, several double ligatures were passed through the neck of the tumour, about one inch distant from each other, then two strong gutta percha bougies were fastened tightly, (one on each side of the neck,) by means of these ligatures, after the manner of a quilled suture. The tumour was then removed by cutting through the neck just below the ligatures, and not more than an ounce of blood was lost. In the middle of the wound there was found an enlarged lymphatic gland, which was removed. A piece of wet lint was then applied to the wound, and the patient was taken to bed.

On the next day the patient was in as favourable a condition as could be desired. As there was no bleeding, the ligatures were loosened, and after four days, no hæmorrhage having ensued, they were entirely removed. On the second day after the removal of the ligatures, there was some hæmorrhage, which was easily stopped by tying the vessel. After this the patient did well in every respect for about three weeks, when she had an attack of erysipelas, which lasted for about a month.

During the time she had the erysipelas the healing process in the wound was retarded, and there were several recurrences of hæmorrhage. After the erysipelas had left her the wound again assumed a healthy appearance, and the patient has done well ever since.

The wound is now closed, and the patient is in good health.

The quilled suture was applied to the neck of the tumour before its removal, in order to strangulate the tumour, and thus prevent any great loss of blood during the operation; the removal of tumours of this description being sometimes attended with considerable hæmorrhage.

In a case related by Mr. Lawrence, ("Medico-Chirurgical Transactions," Vol. XVII.,) a very large quantity of blood was lost, from numerous vessels of various sizes, till the patient became very faint, and the bleeding ceased. In the present case, the delicate constitution of the patient rendered it particularly desirable that such a loss of blood should, if possible, be avoided, and the means resorted to were fortunately attended with complete success.

Although these tumours are much more common, and increase to a larger size, in warm climates, than in this country, there are several cases on record of enormous cellular tumours occurring in England. Mr. Liston removed a cellular tumour of the scrotum, weighing 50 lbs., from a man 22 years of age, and a native of England; and the case related by Mr. Lawrence, above referred to, is another instance of a cellular tumour increasing to an enormous size in this country.

With regard to the nature of these tumours, all the authorities on the subject appear to confirm the opinion, that they are simply n hypertrophy of the skin and cellular tissue, the interstices of the latter being filled with serum. They appear to grow very slowly at first; and all those which have attained a very large size are said to have increased very rapidly after a certain number of years. They are not painful, and the different cases on record prove satisfactorily that they do not return after having been once entirely removed.

ON DISEASES OF THE THECÆ OF TENDONS.

By HOLMES COOTE F.R.C.S.,

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The pathological conditions of the thecæ of tendons have been imperfectly investigated; surgical works afford us but scanty information, and museums contain so few preparations to illustrate the subject, that one might feel inclined to conclude these structures to be exempt (if the ordinary results of inflammation be excepted) from those morbid changes to which other equally highly organised parts are subject. It is known that the walls of the sheaths may become thickened and connected with the tendons which they contain; the lining membrane may lose its smoothness, and assume a rough, granular, or velvety appearance; the synovial fluid which it secretes may be altered in quantity and in quality; the sheaths may be distended by a straw-coloured, or yellowish-red fluid, of watery or of synovial-like consistence, and containing occasionally numerous round or oval cysts floating free in the fluid; but we do not expect to meet with solid growths of fibrous or of other character; and I apprehend their occurrence, as a primary disease, is extremely rare.

Extensive disease of a theca has been many times observed in that synovial sheath which invests the flexor tendons of the hand, and the oval cysts, resembling millet-seeds, are most commonly found under the annular ligament of the wrist; but morbid changes seem more uncommon in the investing thecæ of the flexor tendons of the foot, and I know of no reason to assign for this, except it be that the latter are somewhat protected from injury by their deeper situation, and by the covering of the shoe.

I had the opportunity of seeing two interesting cases of disease of the thecæ of the foot, in both of which solid growths of doubtful character were produced, and the results proved more favourable than was anticipated.

A young lady, aged 21, well-looking and in good health, consulted Mr. Lawrence, April 11, 1849, for a painful swelling in the sole of the right foot. She stated that, seven years ago, she suffered a severe sprain of that ankle, by the foot turning under her in walking; pain next came on in the dorsum of the foot; then a small and extremely painful swelling showed itself in the sole,—so tender that she was able to walk only on the heel,—and even thus with the greatest difficulty. If the foot be pressed momentarily on the ground by a sudden touch on the shoulder when she is standing, she is ready to scream from pain; and she cannot bear the gentlest examination. She is easiest when in bed; but is often aroused from her sleep by sudden twinges of pain. She has tried plasters and remedies of every kind, and all have failed in their turn. An operation having been recommended, she readily assented. Chloroform was administered to the effect of producing complete insensibility, and then, for the first time, the swelling was fairly examined; it was tense but elastic, and felt most like a soft fungous growth, springing from the bones of the feet. The skin and plantar-fascia having been divided, there escaped, in considerable quantity, a soft, greyish, semi-transparent jelly-like substance, which came deeply from the region of the metatarsal bones; some of this substance was of reddish-brown hue, obviously from the admixture of blood. The cavity having been emptied of its contents, the wound was brought together with sutures; union took place readily, and the patient, who experienced great relief from the operation, went back to her residence in the country. Microscopical examination showed, that the matter which escaped from under the plantar fascia was composed of those small granular bodies known by the name of cytoblasts. I have seen them forming the light-brown pulpy mass, into which a synovial membrane may be converted by chronic inflammation.

The patient has not been heard of for some time; the termination of the case is doubtful.

A young lady, aged 20, of slight frame, but in the enjoyment of good health, consulted Mr. Stanley for a painful swelling of the right foot and ankle. Five years ago, she was greatly fatigued by being obliged to take a walk of extreme length, in company with some friends, to avoid passing through a game-preserve, where a large party of gentlemen, some of high rank, were amusing themselves with

shooting pheasants. She arrived home much exhausted, but was sufficiently recovered in a few days to go about as usual. From that time, however, the right foot and ankle were weak and painful, and swelled upon her taking the least exertion. Rest and the application of cold were sufficient to restore the parts to their natural state. About two years ago the swelling became permanent, and the ankle, which was easy when at rest, was so painful when she attempted to walk, that she was obliged permanently to keep the horizontal posture. At different times she was under the care of most of the eminent surgeons of London; every variety of treatment had been adopted without avail; the swelling about the joint increased until the integuments gave way, and there formed an ulcer, from whence flowed a thin sero-purulent fluid.

There is a considerable swelling between the tendo-Achillis and the os calcis, extending down to the sole of the right foot; part of the swelling is firm; part is elastic, as if containing fluid; the integuments covering it are thinned and livid, and have given way in one spot, exposing a a fungous-looking mass of granulations; the movement in the joint is perfect. As the lady's health was beginning to suffer from her confinement to the house, and from the pain, both bodily and mental, connected with the disease; as every kind of treatment, under the most experienced hands, had failed, and the swelling was increasing in every direction, it was thought advisable, the uncertain character of the morbid growth being considered, to recommend the amputation of the limb.

Chloroform having been administered so as to produce complete insensibility, Mr. Stanley removed the diseased foot and ankle by the circular operation performed about the middle of the leg. The arteries having been tied, the integument was united over the sawn bones by ligature. No unfavourable symptoms supervened, and the wound healed in the usual time. The cicatrix, when fully contracted, was not much larger than a sixpence, and was drawn, by the action of the flexor muscles, backward towards the calf; the extremity of the stump, therefore, was covered by healthy skin, well-calculated to bear pressure upon an artificial limb. She will have the use of the knee-joint.

The examination of the diseased parts was particularly interesting. The morbid change was limited to the synovial thecæ, which surround and accompany the tendons of the tibialis posticus and flexor communis digitorum muscles to the sole of the foot; it was therefore strictly circumscribed, and surrounded by healthy structures, and differed from medullary cancer, or fungus hæmatodes, in this important particular; for, cancerous growths, as they increase, invariably involve the tissues upon which they encroach. The thecæ were thickened; their usual bright synovial surface was converted into a dull, uneven, velvety structure, from which was produced a soft growth, composed of cytoblasts, and a small quantity of delicate fibrous tissue. This growth made its way upwards between the posterior surface of the tibia and the tendo-Achillis, and downwards into the sole of the foot between the flexor brevis digitorum and flexor accessorius muscles, both of which were quite healthy. The flexor tendons were unaltered in structure, but were surrounded both by the soft growths above described, and by a large quantity of morbid synovial secretion, which seemed to be contained in more cavities than one; for behind the malleoli it was of a pale straw colour, and somewhat stringy; whilst in the sole of the foot it was of watery consistence, of red colour, from the admixture of blood, and contained coagula.

I believe that the history given by these two patients of the accidental origin of their disease is perfectly correct. In the one case a sudden sprain, in the other a long walk, which taxed the strength to the utmost, produced in the thecæ of the foot chronic inflammatory disturbance and altered nutrition, in consequence of which the thin fibrous walls became thickened, and the interior filled with altered secretion, and a soft friable growth, composed of those bodies termed cytoblasts, which form the base of most structures, whether natural or morbid. The disease, once established, was increased by every effort of the patient to walk, and it was from some such cause that there ensued effusion of blood in the sheath, by which was produced an appearance which, if not accurately examined, might have readily led to the belief that the morbid growth was a medullary or bleeding cancer. It is important that the possibility of such a disease as that here described should be known, for in the early stages some effort may be made to bring the parts back to a healthy state; and in the last condition, when amputation is needed to free the patient from an incurable complaint, the operation may be performed as low down as possible, contrary to what is recommended in cases of malignant diseases of the foot, by which proceeding, recovery is more rapid, the deformity less, and the movement of the knee-joint, so essential to the comfort of a female, is preserved.

ON THE LINUM CATHARTICUM.

By Dr. BUTLER LANE.

This well-known indigenous plant has long enjoyed a popular repute as a cathartic and anti-rheumatic, and, from the experience which I have had in its use, I am induced to believe it to be worthy of scientific notice. It belongs to *pentandria*, *pentagynia*, in the Linnæan system, and to the *Linaceæ* of the natural classification, and is, I believe, common throughout England, more especially in limestone and chalk districts, and on hilly ground.

The extractive matter of the linum catharticum appears to be very soluble in water, and but partially so in alcohol. By the action of hot water, the dried plant yields rather more than one-sixth of its entire weight as an extract, leaving merely inert and tasteless vegetable matter. The medicine has usually been administered in the form of an infusion, but its nauseous flavour renders it very objectionable, and as an aqueous extract of proper pill consistence is readily obtainable, it constitutes the best form for administration. The dose of this is from five to ten grains twice or three times a day: in such quanties, it exerts a mild but efficient cathartic action, generally unattended by griping, and at the same time it sensibly promotes the secretion of the liver. The cathartic action appears to influence both the mucous and muscular structures of the alimentary canal, more especially the upper part of the small intestines. The diuretic action of the linum catharticum will be readily recognised; it obtains to a considerable extent, and I believe the medicinal virtue to be partly connected therewith. The administration of the linum catharticum produces no specific effect on the nervous system, either depressing or otherwise.

During the last twelve months I have administered the linum catharticum extensively, and can speak highly of its efficacy in various complaints. I have never seen its use attended by any dangerous symptom, and rarely by any unpleasantness; I, therefore, consider that it may be designated as a very safe medicine. In catarrhal maladies I have found this simple remedy exceedingly effectual, and also in those subacute rheumatic complaints, which are often alike troublesome and intractable. In the cure of affections of the throat and air passages, I consider the counteracting effect to depend on the peculiar stimulation of the mucous and muscular structures of the alimentary canal, and the sympathetic influence extended to the glandular organs connected therewith. Where the morbid action is of rheumatic character, the curative agency is manifested more slowly, and in apparent dependence on the diuretic action; this diuretic action, doubtless, has a modifying power on the constitution of the blood and its relation to the nervous fibre; and thus an alteration is effected in the abnormal dynamic state, on which the rheumatic diathesis depends. In chronic rheumatism, especially when affecting muscular structure, such as lumbago, the use of the linum catharticum is remarkably beneficial, I think more so than that of any other simple medicine. The diuretic power of the linum catharticum is readily manifested when the medicine is administered at short intervals; its action is mild, and unattended with inconvenience. In cases of ascites connected with hepatic disease I have found it very efficient, so much so even, as often to cause patients to request the repetition of the medicine from which they had previously derived so much benefit. The innocence of the medicinal action of the linum catharticum, and the peculiar nature of the complaints in which it is useful, in my opinion, render it admirably calculated for use as a domestic remedy.

Ewell, Surrey.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

DISEASE OF THE ANTRUM.

In a former report from this hospital (see May 18th) we gave the history of a very interesting case of disease of the antrum, and we described the operation, which was performed by Mr. Fergusson, and which terminated in a good result. At the time the patient was in the hospital, her case was referred to as one of a somewhat rare description. Mr. Fergusson stated that he had only observed it on one occasion before. Curiously enough, a case of a very similar nature has been lately admitted into the hospital, and was brought into the theatre for operation on Saturday last. It will be remembered that in the former instance the patient was a young woman, that the disease had only been observed for one year, and that the cavity of the antrum had become greatly expanded, and an enormous quantity of a thick fluid, containing a considerable amount of cholesterine, was found to be collected and retained there. In the instance now under notice, the patient is a man upwards of 40, and the disease has been noticed by him for nearly eight years. It commenced as a swelling on the cheek, and increased in size; however, he did not allow any interference for three years after he had first noticed it, at which time he applied to a surgeon, who punctured the tumour, and let out a quantity of reddish-looking fluid. This opening healed up, and remained in that condition until a few weeks ago, when the swelling burst, and a quantity of yellowish fluid was evacuated, and a discharge of the same nature has continued since. On admission, it was discovered that there was a prominent tumour of the right superior maxilla; there was no protrusion of the palate. On applying the fingers to the anterior and lower wall of the antrum, a distinct movement could be made, which was accompanied by a creaking noise, evidently produced by the entrance and exit of the air into the cavity of the antrum, through an opening situated on the alveolar border, which admitted a probe, and through which the discharge was kept up. Mr. Fergusson at once made up his mind as to the nature of the disease, and determined upon an operation somewhat similar to the one performed in the case of the patient who had some weeks ago been under treatment. On Saturday last, therefore, an operation was performed in the following manner:—The patient was placed under the influence of chloroform, an incision was then made through the mesial line of the upper lip, and carried along into the right nostril; the soft parts were then dissected up, and off the alveolar border, and the expansion of the antrum was fully exposed. The next step of the proceeding was the removal of a portion of the front wall of the antrum; this was readily effected by the application of a sharp curved pair of cutting pliers: about a square inch of bone was removed. The divided lip was now brought accurately together by means of three needles, and secured by threads, as in the ordinary operation of hare-lip, and the patient was taken away to bed. A very free hæmorrhage occurred from the coronary arteries; but this was readily checked by the application of pressure with the fingers of an assistant during the remaining steps of the operative process.

After the patient was removed, Mr. Fergusson addressed some remarks to the pupils upon the nature of the case, and upon the object of the proceeding he had put in force. He compared the case with that of the young woman before alluded to. The similarity between the two was great, and it was somewhat remarkable, that they should have followed so close upon each other, as instances of this kind were by no means of common occurrence. He had only seen one of the kind before, and he showed a cast of it, which is now in the King's College Museum. There was a remarkable prominence of the cheek, caused by the anterior wall of the antrum being turned upwards. With respect to the operation just performed, he had considered it to be the proper one under the circumstances; there was considerable deformity existing from the swelling of the jaw, and a constant discharge of fluid; and the best mode of obviating these was to remove a portion of the bone. The pupils had seen how much benefit had resulted in the case of the woman from the same kind of operation; the parts had much diminished in size before she left the hospital, and very little deformity remained. In the present instance he had somewhat changed the mode of proceeding, as he had made an incision through the soft parts, which he had not done in the previous case. He had made the external incision in the present instance, because it greatly facilitated the steps of the operation. It would have been possible for him to have got at and removed the portion of bone, through the mouth alone, but it would have been an awkward and troublesome proceeding; in order, therefore, to get more readily at the expansion of the jaw, he had laid open the lip and dissected it up. They had seen that the incision was so placed that no deformity could ensue from it; it was one which he was in the habit of making in operations on the superior maxilla. It was formerly the custom, and is now with some, to make large cuts across the cheek, in order to remove the upper jaw bone, but he contented himself, in the majority of cases in which he operated, with making a cut through the upper lip into the nostril, and dissecting the soft parts well up from the bone beneath. It was surprising to what an extent the bony structures might be exposed in this manner. He had now removed large tumours, involving nearly the whole of the upper jaw bone, in this manner, and nothing but a very slight scar along the upper lip is observable, after the cicatrization of the wound. He believed he was the first who recommended and practised this particular incision in the removal of tumours of the superior maxilla.

We must do Mr. Fergusson the justice to subscribe to the correctness of his remarks, as to the great superiority obtained in the removal of tumours of the superior maxilla by means of this very limited incision through the upper lip. We have had opportunities of seeing cases in which nearly the whole of the bone has been removed by this small cut; we have noticed the facility with which the parts could be exposed, and we have seen the cases after everything has done well, and so little a scar has been left, that it would be impossible to guess that such a severe operation had been performed. The ordinary operation of laying open the cheek, from the angle of the mouth to the orbit, leaves a fearful-looking scar, as we can witness every now and then in the case of a young woman upon whom Mr. Fergusson himself operated successfully some years ago; and therefore these large incisions should be avoided if possible.

We are happy to state, that the case has succeeded admirably. It is now three weeks since the operation. The divided lip has perfectly united, leaving but a faint scar; the opening in the antrum has nearly closed up, and there is hardly any deformity remaining.

WESTMINSTER HOSPITAL.

By S. MILTON, Esq., M.R.C.S

MELANOSIS OF THE EYE.—EXTIRPATION.

Extirpation of the eye is a very repulsive, and not a very common operation; indeed, when performed for melanosis, it may be classed amongst the very rare operations. Mr. Guthrie, in his work on the Operative Surgery of the Eye, says he has five times extirpated the globe of the eye for disease; and this may be considered a very fair average of practice. In several hundreds of cases we have only seen this operation four times. Its history, as an operation, is that of most of the others which date from the sixteenth century: rude and barbarous to all appearance at the commencement, it was embraced, rejected, revived, and modified, till we see it in its present almost perfected condition. It was first of all performed at Dresden by Bartish, who, with a spoon sharpened as well as the cutlery of the day allowed, scooped out the eye at one sweep. Were this organ really a "rich jelly," no better plan could be well imagined; but, as it is somewhat tougher and more composite, other plans were introduced; among them, that with a curved knife with a blunt extremity. This was a step in the right direction; but, as there are always men ready to disimprove any operation, one patient was subjected to the experiment of having the eye torn out by means of hooks;—a piece of barbarity which proved fatal to the victim experimented on.

With regard to the different cases in which it is employed, we may state, that this operation is almost entirely limited to melanosis, fungus hæmatodes, and scirrhus. In the first, its success is doubtful; in the second,

it is generally really injurious. In scirrhus it may be very often performed with the best prospect of success, provided the cancerous diathesis do not manifest itself in the other organs; in fact, it would almost seem as if scirrhus could be tampered with here longer than in any other part of the body, for, according to Mackenzie, we may perform extirpation of the eye, even when the conjunctiva, eyelids, and the orbital cellular membrane are affected. The case before us may be fairly considered as an example of a disease intermediate between scirrhus and fungus hæmatodes in duration of growth, seat, nature, and prognosis; and the result of it will enable us to see if the operation, with the aid of chloroform, and performed at a not very late period, can avail to check, partially or completely, a disease, of which there is but too much reason to fear the return.

The history of the case, for the particulars of which we are indebted to the kindness of Mr. Lynn and his dresser, Mr. Evans, is as follows:—George Bull, aged 40, a native of Oxford, and following the occupation of a farm-labourer and ostler, was admitted, on the 21st of May, into Northumberland-ward, under the care of Mr. Lynn, for a large tumour projecting from and entirely filling up the right orbit. He states that, five months ago, he was seized with severe cold in the eye, which in the course of one night became swollen to so great an extent that his vision was completely destroyed. The tumour was hard, somewhat elastic, moveable to a certain extent, and bearing all the characteristics of melanosis. It was covered, for a great part of the surface, by the distended palpebra, which had assumed a dusky livid colour. There was no appearance of the conjunctiva, and the eye was entirely disorganised. The man's general health,—though not so much impaired as might have been expected,—was evidently becoming affected by the advance of the disease.

On his admission, stimulants were at first applied in order to induce suppuration; but their employment, which produced no pain, had no effective result, and, on a consultation being held, it was deemed expedient, as the only chance of saving the patient, to remove the tumour, which was accordingly done on June 22. The patient having been placed under the influence of chloroform, Mr. Lynn proceeded to remove the eye; and, having seized the globe, he rapidly and carefully dissected it from the cavity till he reached its posterior surface, when the optic nerves and vessels were separated by a pair of strong curved scissors. Little hæmorrhage ensued, only one vessel requiring to be taken up. The clotted blood was removed, a small piece of sponge was placed in the cavity, and the patient was removed in profound ignorance, probably, of what he had undergone.

The tumour greatly resembled, on examination, a mass of coagulated blood, in which no traces of the original structure of the organ could be discerned.

Now, let us just cast a glance at a case of fungus hæmatodes, and one of inflammation of the eye.

In the summer of 1847, two boys were admitted at the same time into the Hôtel-Dieu, under M. Blandin, for disease of the eye. The one had suffered for two or three weeks with inflammation of the eye, as he thought, which he attributed to cold. The eye, almost covered with the eyelids, presented the appearance of a livid hemisphere projecting from the cheek, and about the size of half a small orange. The organ was destroyed by the ravages of the disease, the pain great, the patient weak. M. Blandin pronounced it to be fungus hæmatodes; he was right,—it soon destroyed the patient.

The other had apparently the same disease, on a smaller scale; he attributed it also to cold, though it was in the summer. The eye was here also covered by the lids, which were livid and swollen. It had lasted nearly as long as the other, but was not above half the size, and the strength of the patient was not so far gone. On comparing the two boys, the very appearance of the inflamed hemisphere on the cheek of each pointed out allied diseases. The great French surgeon called this inflammation of the eye. The result was, that the patient was saved, but the eye was disorganised and lost.

Who does not trace a close connexion between these diseases and the case before us, which is, perhaps, the intermediate step between bad inflammation and fungus hæmatodes? And how wide is the step from these to cancer, beginning, like a fungous excrescence, on the anterior hemisphere of the eye, slowly converting all the tissues into a hard scirrhous mass of small size?

CENTRAL LONDON OPHTHALMIC HOSPITAL.

By Dr. ROBERT TAYLOR.
Physician to the Hospital.

ARTIFICIAL PUPIL.

The patient was a man aged eighty-two. He had been operated on at another institution, for cataracts, by the process of extraction. The left eye was lost. The iris of the right was prolapsed towards the lower and outer portion of the cornea, the direction in which the cornea had been divided; and the pupil was displaced in the same direction, and reduced to a slit-like vertical aperture. He had only just enough vision to enable him to move about in a room.

With a knife somewhat like a lancet, but very much smaller, an opening was made into the anterior chamber through the cicatrix in the cornea, and the iris was cut across at a right angle with the upper end of the deformed pupil. As soon as the division was effected, the angular portion of iris, thus made, retracted, and an excellent pupil was the result.

Mr. Walton remarked that the case was one of a class which is the best suited for operation. The natural pupil had been rendered useless, and closed from a mere mechanical cause, the iris not having been in any way diseased or structurally injured; therefore, when divided, it was sure to retract; and, what was equally important, it was not likely to inflame from the operation, and the simplest method of making a false pupil was applicable. The commonest cause of failure in operating on the iris was owing to inflammatory action, whereby the new-made aperture is speedily closed by lymph or from the same action; but by a slower process, the edges of the divided part are brought together. When an iris that has been diseased is operated on, inflammation is very generally the consequence. It was impossible to inflict less injury on the cornea, or to divide the iris with less damage to its fibres, or with less likelihood of separating it from its ciliary connexions, by any other known method of operating than that adopted. The new pupil had assumed a roundness of form that was unexpected.

REMOVAL OF OPAQUE CAPSULE AFTER THE OPERATION FOR CATARACT, BY SOLUTION.

This patient was 19 years old. There had been a cataract in each eye, and both eyes had been operated on. Although the pupil of the left eye was partially occupied by some bands of capsule, the patient saw better with that eye than with its fellow, in which the pupil was clear, and Mr. Walton determined to remove the capsule, hoping thereby to restore excellent sight to that eye. The cataracts had formed about three years ago. Several attempts had been made on former occasions to divide, as well as to depress, this offending capsule, but they were unavailing, and extraction was now determined on. The cornea was opened by a very small knife, the capsule forceps introduced, the capsule seized, and an attempt made to remove it, but only as much as was included between the blades of the delicate forceps could be got away A second use of the forceps quite cleared the pupil.

Mr. Walton pointed out the advantage of operating in this manner. The opening in the cornea was so small, that a gentleman present (Mr. Coulson) remarked that its position was scarcely perceptible. This was indeed the case, for he had to look narrowly for it after he had withdrawn the knife, and before he introduced the forceps. By using the knife with care, and steadying the eye with as little pressure of it as was possible, aqueous humour did not escape before the forceps was introduced, and all of it had not run out till the second portion of capsule was withdrawn, which was indeed a very great advantage, for the pupil remained dilated, whereby the forceps could be the better applied to the capsule, and the iris was out of the way of injury from the instrument, by being at its natural distance from the cornea. He considered this manner of removing capsule as one of the triumphs of modern ophthalmic surgery. When he had attempted to depress the capsule, he was not in possession of the forceps he now used, and on the peculiarities of which he need not dwell, as he had frequently described them. The last attempt to clear the pupil was by a posterior operation, eighteen months ago, and violent inflammation ensued, and

he had then strongly recommended the lad never to submit to any further operation. But meeting with him recently, he informed him that better means were now at his disposal, and advised him to submit to one more attempt. An acquiescence was immediately given.

ENTROPIUM OF THE LEFT UPPER EYE-LID.

The patient was a male adult. About twelve months ago the cilia began to irritate the globe; the palliative means of plucking them out had been resorted to, and was at first beneficial, but the lid had become so much inverted, that although only short stumps of the cilia remained, from the constant endeavours to remove them, they produced more irritation than ever the entire lashes did. The man had been sent to Mr. Walton by his friend Mr. Borlasse Childs, that he might put into execution the method of operating for entropium which he had lately laid before the Profession. The case was well adapted for it, being what Mr. Walton termed one of "genuine entropium." The integuments were drawn tight, and an incision was made along the edge of the lid, from one corner to the other. A second incision was then made above, and about two and a half or three lines from the first, joining it at each extremity, the point of the knife being carried in both down to the cartilage. The skin so isolated, and the part of the orbicularis palpebrarum muscle contiguous to it, were then dissected off by commencing at one end, and using the knife in a vertical direction till the whole was removed. Several pauses were made for the sponge to be used, in order that the denuded surface of the cartilage should be apparent to the bystanders, to prove to them fully, that the whole of the muscular tissue had been removed. The edges of the skin were brought together by three sutures. The effect of the operation was very striking, the inverting power of the muscle was destroyed, and the amount of skin lost was just sufficient to evert the bent lid.

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THE MEDICAL TIMES.

SATURDAY, JULY 13.

CHLOROFORM.

There has occurred within the last fortnight, at one of the Metropolitan hospitals, an unfortunate case, in which death ensued during an operation from the administration of chloreform. The event has excited considerable alarm in the public mind, and several surgeons, including Mr. Cock, of Guy's Hospital, the operator in the instance here alluded to, have openly expressed their disapprobation of the continuance of the practice. We know nothing of the cause of death beyond what transpired at the inquest; the only point that struck us was, that the time specified during which inhalation was continued, seemed extremely short for the inhaler to be tried and thrown aside, and for the substitution of a folded napkin soaked in the fluid. It is a very great point to administer chloroform slowly, and to watch the effect which it produces upon the nervous and vascular systems; five, or even ten minutes may elapse, before a patient becomes unconscious. It is equally important to allow of an admixture of atmospheric air with the inhaled vapour; consequently we disapprove altogether of the folded napkin in lieu of the ordinary inhaler, which removes the sponge containing the chloroform from immediate contact with the aperture either of the month or the nose. Still we dare say that proper precautions were here adopted, and the case must be regarded as one of those mishaps, the which, whilst we most sincerely deplore, we should not permit to exercise an influence beyond its immediate worth. We think that Mr. Cock expressed his disapprobation of the use of chloroform at the inquest too strongly; a single fatal case out of many thousands should not induce us to cast away the means of alleviating much human suffering. Sudden and unexpected deaths would ensue long before the introduction of chloroform; years ago, before even ether was thought of as an anæsthetic agent, we saw one patient sink without any assignable cause, after the amputation of a finger; a second die with typhoid symptoms a few days after the removal of a toe. We have no hesitation in saying that the general results of operations performed upon patients rendered insensible are far more satisfactory than where the nervous system has been shaken and depressed by apprehension and suffering; and that the really slight risk attending the employment of chloroform is substituted for far more numerous and graver evils.

But let us examine the real amount of risk. It is a simple matter of statistical inquiry. We are informed that at St. Bartholomew's Hospital, where no operation is performed without its administration, no fatal accident has happened from that cause out of seven thousand cases. We beg to impress this fact upon our readers; chloroform has been successfully administered seven thousand times in a single hospital. Think only of the amount of suffering which has been thus spared. Both Mr. Lawrence and Mr. Stanley invariably use it in private practice, and with the same result. Infants in arms, and the aged who have passed their three score years and ten, alike reap advantage from its beneficial influence. We heard of patients being kept under its influence an hour, an hour and a quarter, and even longer, during the continuance of a tedious and dangerous dissection. The same evidence was given to us by Mr. Lloyd, who was perfectly decided upon the advantage of its employment; so also by the Assistant-Surgeons, among whom but one opinion upon the subject prevailed. It would not be fair to deny, that there have been instances in which, for a short time, some anxiety was felt for the patient's recovery. Mr. Tracy, who has superintended its administration at the hospital, witnessed somewhat alarming fainting, and failure of the circulation, about four times out of the seven thousand; but, by keeping the finger constantly upon the pulse, and by removing the inhaler the moment the heart's action became feeble, these dangerous symptoms were, almost to a certainty, avoided. We believe that other hospitals could afford us similar statements; and, without wishing to attach the slightest blame to any of the gentlemen who were concerned with this last fatal case, and who evidently felt deeply grieved at a calamity which they took all means in their power to avoid, we ask, Is not the evidence in favour of the use of chloroform, as derived even from one single hospital, sufficient to set the question for ever at rest?

It was not to be expected that this event at Guy's Hospital should pass without a voice being heard from Edinburgh. The practice there is to circulate letters upon every possible occasion in the daily papers, or in periodicals like *Cham-*

bers's Edinburgh Journal, explaining, with infinite modesty, how all surgical knowledge emanates in an unceasing current from the northern metropolis, and how dry and unproductive the London soil remains.

An Edinburgh surgeon, in the *Times*, July 4, tells us that the chloroform used by Mr. Cock was bad; that there was some *imperfection* (?) in the mode of its administration; and he winds up with a piece of advice to the London surgeons generally: "It would be wise if the London surgeons, instead of subjecting their patients to needless pain, and maintaining an unjust apprehension on the part of the public, were to acquaint themselves with the errors to be avoided in the choice and administration of chloroform."

We lately met a young lady from Scotland, who observed with artless simplicity, "I suppose the use of chloroform has not got so far 'sooth' yet, as London?" and who evidently considered we were romancing when we assured her that more was administered in one week in London than in a couple of months in her own dear metropolis. But long before the introduction of pure chloroform, Mr. Lawrence was in the habit of using it, in the form of chloric ether, most extensively in private practice. He found that many patients could not inhale sulphuric ether without suffering most severely from cough and a sense of suffocation. He, therefore, substituted chloric ether, (*i. e.*, chloroform plus spirit and water,) which could be inspired without difficulty by the most excitable, and which was greatly preferred by many patients. When, therefore, chloroform was introduced, as it is now used, it was no stranger: it had been given in its diluted form in London, many months before its discovery in Edinburgh.

We do not know from what source comes the chloroform used in Guy's Hospital; but we apprehend that nothing can be purer than that prepared by Taylor, Hooper, David Bell, Morson, and other London chemists. In many hospitals in London, chloroform is supplied from a Scotch house, *not as being purer*, but as being cheap—and equally good for general use.

There may have been no fatal case at the Edinburgh Infirmary from the employment of chloroform. It is an institution of very moderate size, and fortunate results often attend experiments conducted upon a small scale.

There has been no fatal case at St. Bartholomew's Hospital, where anæsthetic agents have been far more extensively tried than anywhere else; but the surgeons do not advertise this fact all over the country in the Daily Papers. Such a proceeding would be considered unprofessional and vulgar, more especially when at the expense of a neighbouring institution.

This Edinburgh chatter about chloroform is as silly as some charges of incompetency brought against the Londoners by their northern brethren. It is asserted, in all gravity, that London surgeons are afraid of operating upon enlarged tonsils for fear of wounding the carotid artery! and the students positively believe the statement!! A surgeon of unsavoury urethral notoriety assures the world, that the London surgeons cannot pass a catheter properly, and he advertises for patients, whose strictures have been pronounced impermeable! We heard of the case, however, of a gentleman of Bath, whose urethra had been slit up, in consequence of an old stricture, in the most approved fashion, by a celebrated northern practitioner, with only temporary benefit; for, upon his return to his home, the contraction re-formed as bad as before, and the patient determined to put himself again under the care of one from whom he had derived more benefit, namely, Mr. Courtenay, of advertising notoriety; but this may be a mere accident.

If these charges of incompetency against the London surgeons be true, what must be the state of their schools of medicine! We strongly recommend the pupils to rebel; and, Syme's Surgery in hand, to turn their backs upon a metropolis that can produce nothing better than a Brodie, an Aston Key, a Lawrence, or a Cooper.

THE NAVAL ASSISTANT-SURGEONS.

The result of Petitions to Parliament from all parts of the United Kingdom in favour of the Naval Assistant-Surgeons, and a vote of the House of Commons to the effect, "that the accommodation provided for those officers on board ship is inadequate and insufficient for securing the full benefit of their professional service," has just transpired. On Friday last Sir Francis Baring, in reply to a question from Captain Boldero, as to what steps had been taken in consequence of the resolution of the House of the 8th of April, said:—

"He had stated in the course of the debate that a cabin was dedicated to the service of the assistant-surgeons. On inquiry, it appeared, that although the order was issued by the Admiralty it was not carried into effect to the full extent. But it was intended that care should be taken that the order should be more fully carried out. With regard to cabins for the assistant-surgeons, the vote of the House would be attended to, but it was not possible by such a vote to add to the accommodation of a ship; and whilst it was the anxious wish of the Admiralty to give accommodation to all officers in the service, yet there were two limits; the first was the efficiency of the ship as a ship of war, and the next was, that they must attend to the accommodation of the crew. In some ships it would be possible to give additional room, and in those ships it was the wish and the direction of the Admiralty that such accommodation should be given to the assistant-surgeons; but in others it was not possible, without infringing on the limits he had mentioned. As to the messing, it was his intention that assistant-surgeons should be admitted into the ward-room after a certain period—three years of service. On the part of some officers there was more than a doubt as to the wisdom of the vote come to by the House; and, even amongst those who were anxious that additional accommodation should be given, it was felt extremely important for the service that assistant-surgeons should at least serve some apprenticeship before they were admitted to the ward-room."

We confess we had hoped better things from Sir Francis Baring. The assistant-surgeon is, after all, only to be partially released from degradation. No measure of justice, it would appear, can be rendered his class without some alloy of bitterness. True, the period of durance in the midshipmen's berth has been shortened; but three years' domiciliation there is still required of him before he can be considered a fitting associate for the officers in the ward-room.

We would ask the First Lord what useful purpose can be served by the exaction of this "*apprenticeship*" from the assistant-surgeon?

Is it that he, as a member of the Royal College of Surgeons, or a doctor of medicine, (a rank which in civil society takes precedence of captains of the army and navy,) is held to be ineligible for the society of lieutenants of the navy; of the lieutenants of marines, who may have just been duly certified to be able "to write English correctly from dictation," and to possess some knowledge of arithmetic and algebra; of the chaplain; of the purser; of the schoolmaster, who may, for the first time in his life, be going "abroad;" or of his professional brother, the surgeon, who possesses, in all probability, the single advantage of having entered the service a few years before him?

Or is it, that this probationary misery to the assistant-surgeon is intended to take off the keen edge of disappoint-

ment and mortification from some who are incapable of perceiving that change of condition does not necessarily involve "subversion of discipline," and who therefore shudder at the thought of even that small amount of improvement in his position which has now been conceded him?

What the First Lord said about cabins is far from being satisfactory. They are to be given the assistant-surgeon when practicable. Who, we should like to know, are to decide the question of practicability in all cases? Sir Francis himself confessed that the order relative to the reading cabins had been disobeyed. What guarantee, then, have the assistant-surgeons that the new order for cabins will not be similarly evaded by commanding officers? Unless the dockyard authorities have positive and strict orders duly to allot the assistant-surgeons cabins, we fear we shall hear of more instances in which "the orders issued by the Admiralty were not carried into effect to the full extent."

But the arrangement is altogether defective and unsuited to the occasion. Granting as we do that it provides for the majority of the assistant-surgeons already in the service, it has the fatal objection of still deterring first-class men from entering the service. It provides, in fact, and that even only partially, for the present, without regard to the more important consideration of procuring a high order of men for the future.

We have neither space nor inclination at present to pursue this subject further; but we cannot refrain from expressing our deep sorrow that this long and painfully agitated question should not now have been finally and satisfactorily settled. So far as we have seen, no attempt has ever been made to support the cause of the assistant-surgeons by factious or improper motives of any kind. A vindication of the dignity of their profession, and the well-being of the naval service, seem ever to have been the objects they and their advocates sought to obtain.

The *concession* which has been granted the assistant-surgeons we can hardly expect to be received with satisfaction. We feel assured, however, that it will meet with respect; and that the use which they will make of this *instalment* of the debt due to them, will not fail to show those in high places how amply they have redeemed their claim to the WHOLE.

While we heartily accord to the First Lord a due meed of gratitude for the step in the right direction which he has taken, we must ever regret that he did not, with such an opportunity, go further. How easy would it be for him, even now, to sweep away every remnant of "Roderick Randomism" from that branch of the public service which he so ably administers. The name of Baring might then go down to posterity as having worthily finished that reform in a department of the naval medical service which, nearly fifty years ago, originated with one of the greatest of his predecessors in the presidential chair at the Admiralty—that most illustrious statesman, the late Viscount Melville.

MR. SYME AND THE LONDON SURGEONS.

IT has been with a mixture of pain, surprise, and regret, that we have seen, month after month, in the *Edinburgh Monthly Journal of Medicine*, attacks of the most personal and offensive description on some of our leading metropolitan surgeons. We have hitherto abstained from noticing this, in the hope that the writer himself, or his friends, would see the impropriety as well as impolicy of such proceedings, and would cease to pursue the subject. As, however, there does not appear to be any indication of such good feeling or good manners, we can no longer keep silence. The conductors of that journal are gentlemen of high reputation, who would be received in London, as visiters, with all the attention and cordiality their distinction so richly merits; but we would ask Professors Christison, Simpson, Goodsir, and their colleagues, whether they think it creditable to them as individuals, creditable to the profession to which they belong, or creditable to the University of which they are the ornaments, to pollute the pages of a journal published under their direction and authority, with attacks as libellous and offensive as any which could emanate from the most scurrilous penny-a-liner? We cannot but consider this as both short-sighted and wrong. The gratification of such malice is short-sighted as regards the interests of the journal, and wrong on account of the degradation inseparable from it. It is our conviction, that the time has arrived when every effort ought to be made to raise the moral character and *status* of our profession,—yet such writing has a direct tendency to lower it. *We* shall endeavour to advance; if our Edinburgh contemporary persists in this course, he cannot fail to retrograde.

As the opportunity now offers, we announce our determination steadily to promote the honour, the respectability, and the harmony of our profession, by setting our face against everything mean and discreditable, by avoiding personalities, and abstaining from vituperation, however much we may be abused. Errors shall be fearlessly pointed out, and every endeavour made to rectify abuses, but not by scurrilous attacks upon existing institutions, or imputations which cannot be proved. That the long list of distinguished contributors who have promised us their support will excite envy, is but natural; but the very consciousness of our strength will enable us to regard malice with a smile, and its shafts will glance off harmless.

It has been too much the custom of late to underrate our Profession, and to decry it in every possible way. That it has its faults and its drawbacks we well know, but those faults are exaggerated by party spirit. It would be well if every member were to reflect, that by an upright and dignified line of conduct, it is in his own power to raise his profession in public estimation; it would be well if each were to ask himself whether it is not both laudable and right to lay aside petty jealousies and heart-burnings, and to act by all in an open and manly spirit; instead of pulling down old-established, solid institutions, for the purpose of building paper-houses on their ruins, we should do justice to their good points, and cordially endeavour to make them subservient to the improvement and education of those who are to come after us. If, we say, this were more generally done,—instead of the medical profession being a very scorn and reproach for its disunion, it would speedily be acknowledged to be worthy of the noble objects for which it is designed, and not less worthy of the followers of HIM who, when upon earth, thought it not beneath him to heal the sick, to comfort the afflicted, and to give sight to the blind.

PROFESSORSHIP OF SURGERY IN UNIVERSITY COLLEGE.

WE are happy to hear that Mr. Erichsen has been appointed to the professorship of surgery in University College, vacant by the retirement of Mr. Arnott. Mr. Erichsen is one of the best known of that class of already eminent surgeons, who are the natural successors of our Brodies and Lawrences, when the time shall come in which unrelenting fate must pass the fatal sentence on these veterans of our art. The new professor in University College is

not only a good operator, and a skilled and trusty surgeon, but is, we understand, a tried and approved teacher. We congratulate him on the opportunity which is now given to him of displaying talents of no common order, and we do not doubt he will be found a worthy successor to the eminent men in whose vacated chair he is now placed.

Mr. Quain, it is generally known, declined the offer of this professorship, preferring the professorship of clinical surgery, which he has for some time so ably held.

Perhaps no more fitting occasion than the present can occur for us to observe (and we would not willingly omit any suitable occasion) that clinical surgery, like clinical medicine, has not yet received the recognition by the Licensing Corporations of London, to which it is obviously entitled. The Society of Apothecaries have indeed lately made an advance in the right direction, inasmuch as they have, though only in a hesitating or partial way, given a place to clinical medicine in their curriculum. We have no doubt, however, that the time must come, and that, too, before long, when bed-side instruction will take its proper place in the minds and acts of even our tardigrade medical rulers. Every one knows that in the Continental schools the most prominent position has long been conceded to clinical medicine and surgery. In Edinburgh, too, clinical surgery has for many years had a distinct professor; and a professorship of the same kind was instituted in University College for the late Mr. Liston. It is this professorship that Mr. Quain now holds, and that, as it appears, he has determined to continue to hold.

BRITISH MEDICAL FUND.

We beg to refer our readers to the Advertisement on our cover, respecting the British Medical Fund, which they will perceive to be now fully constituted. We venture to say, that the establishment of this Society deserves to be regarded as an important epoch in the economical history of medicine in this country.

THE LATE SIR ROBERT PEEL.

An erroneous impression existing on the minds of many persons relative to the circumstances which led to the death of this accomplished statesman, we are happy to be able to give, on the highest authority, a statement of the facts as they really occurred.

The horse upon which Sir Robert Peel was riding at the time of the accident, had not been exercised for some days, and was unusually fresh. Sir Robert was not at any time a first-rate equestrian, and having been up for several nights until after three a.m., and undergone much mental excitement, his nerves were unstrung. Consequently, when the horse shied and became restive, he lost his seat and fell heavily on the ground. A report has been spread that the accident was the result of a fit. This is utterly untrue, nor is there a shadow of ground for such a supposition; indeed, there are distinct proofs to the contrary. Had he been attacked with epilepsy or apoplexy, insensibility would have continued for some time; and there would have been stertorous breathing, whereas he was merely stunned for a few minutes. Had there been paralysis, some loss of power of the extremities would have appeared, which, we need hardly say, was not the case. From the first, there was excessive prostration of the vital powers, approaching collapse, and from this he only rallied for a short time, to sink again. Sir Robert was at all times exceedingly susceptible of pain, and the suffering from the accident was so intense, that no minute examination of the injured parts could be made. It has been said, why was not chloroform used? For two reasons. First, because his state of extreme exhaustion forbad it; and secondly, because the most elaborate examination would in nowise have altered the treatment. It was ascertained that there was comminuted fracture of the clavicle, and from the first, fractured rib was suspected; but, though it was ascertained after death that a rib *was* fractured, that threw no additional light upon the symptoms, from the simple reason, that they bore no reference to such a fracture. There was visible to the eye a large swelling under the collar-bone, which pulsated synchronously with the auricle of the heart, clearly indicating that a large vein had been wounded and was pouring out blood, which lay external to the pleura; the hand, in like manner, appreciated the pulsation of the ventricle, and proved that something unnatural was interposed between the heart and the hand, which could be nothing but blood.

Why could not the symptoms have been caused by the fractured rib? Because there were no symptoms of effusion into the chest, or marked inflammation. Sir Robert could lie flat on his back; respiration was heard quite low down in the chest; there was no difficulty of breathing, and, moreover, careful examination with the stethoscope and the ear satisfactorily proved, that there was no mischief going on about the lung.

What, then, was the actual cause of death? In all human probability, it was exhaustion from hæmorrhage; a large vein — doubtless the subclavian — had been ruptured or wounded, and had poured out blood *between the pleura and the chest*,—a diffused venous aneurism in fact; this caused the great exhaustion—the intermittent pulse—the agony of suffering—for the clot must have involved and pressed upon the axillary plexus of nerves; and it is consolatory to know, that no human art could have averted the melancholy catastrophe, and that everything was done, which could be done.

BIBLIOGRAPHICAL RECORD.

Familiar Views on Lunacy and Lunatic Life By the late Medical Superintendent of an Asylum for the Insane. London. 1850.

The author states, that he undertook the composition of the present little treatise, from a conviction, that a work in which *all medical and other offensive detail should be entirely omitted*, might find favour with such readers of either sex as wish to indulge a rational curiosity regarding the past and present state of knowledge on the subject of intellectual disorder, and the institutions and remedial measures which have, from time to time, been adapted to the purpose of its amendment, and yet are unprepared to encounter reports and session-papers, or prohibited the use of such books as are too exclusively of a professional character.

It would be unjust and uncourteous to quarrel with an author because he does not produce a book different from that which he contemplated. For ourselves, we should have liked a more scientific work, treating of fewer subjects than are here brought under notice; and we think the author is equal to the task. He is evidently well and variously read, and enlivens his pages with many amusing anecdotes and pertinent remarks. The style is generally easy and correct; and the work may, without hesitation, be recommended to that class of readers to whom it is addressed.

We shall probably, on a subsequent occasion, give a more detailed analysis of its contents.

The Principles of Surgery. By John A. Orr, F.R.C.S.I.; one of the Surgeons of the City of Dublin Hospital. Pp. 496. Dublin. 1850.

Mr. Orr has added another Manual of Surgery to the many already in circulation. The author is surgeon to a

public hospital; and, though most persons will deny the necessity for the publication of the work before us, it is, doubtless, of great advantage to pupils to possess a text-book of their teachers' lectures and practice,—and a very excellent text-book has Mr. Orr presented to them.

The details of operative surgery are avoided,—a novel feature in similar works, and one of which we much approve; for, since a lengthened description of operations cannot be given, a meagre one ought to be omitted. Neither do we find the usual hand-book illustrations in Mr. Orr's work; and this we do not consider any drawback to its utility. We do not see what a student can learn from them, and very sure are we, that he ought not to learn from them.

The highest praise we can bestow upon the work is to say, it is the record of the opinions of an able Surgeon.

Proteus; or, the Law of Nature.(a) By Charles Bland Radcliffe, M.B.; Licentiate of the Royal College of Physicians; Lecturer on Vegetable Physiology and Botany at the Westminster Hospital, &c. Pp. 150. London. 1850.

It is only of late years that physiologists have endeavoured to demonstrate some definite laws, by which organic elements, or tissues, are combined to form organs, in the same way as particles of crystals are combined to form salts, several of which have one common primary character, however different their aspect and properties. This idea, originating in Germany, was adopted and illustrated in France by G. de Saint Hilaire; while in England, the researches of men such as Professor Owen and Mr. Maclise, have fixed the stamp of truth upon what at first appeared forced and fanciful speculations, and the science of the unity of organisation is now universally acknowledged and received.

The doctrine of the laws that regulate the formation of organs was first observed with respect to the several bones which comprise the skelcton of the vertebral animals. It was observed, that all the essential parts comprising a vertebra, were to be found in the occipital bone, that the same presented themselves in the parietal bones, and again in the frontal bone. The skull, therefore, was considered to consist essentially of three vetebræ, however dissimilar it might be in its general aspect. And it is not only in man, and the higher tribes of animals, that this dissimilarity is striking: in the lowest family of fishes, the vertebræ and bones of the skull are not only essentially, but very obviously, analogous to each other; and the transition from these, through reptiles, birds, and quadrupeds, up to man, is, with respect to these bones, so gradual, that any analogy which we admit in the first case must be extended also to the last.

> "All Nature is but art unknown to thee:
> All chance, direction which thou canst not see."

Unfortunately, to this most interesting branch of science the absurd term of "transcendental anatomy"—borrowed from the Germans— has been applied; and as—still more unfortunately—names govern the opinions and practices of more men than would choose to acknowledge the fact, the subject has not been so generally studied as it deserves. We trust we have said enough to excite attention in those who have not hitherto considered the subject; and it gives us much pleasure to recommend, as an introduction to the study of the unity of organisation, the interesting and well-written work of Mr. Radcliffe, now before us. In it the reader will find the doctrine clearly and concisely illustrated; and, moreover, he cannot fail to rise from its perusal convinced, as firmly as we are ourselves, that "Nature harmonises with Revelation, and the former cannot be understood in the fullest acceptation, except it be interpreted by the latter."

Atalectasis Pulmonum; or, Closure of the Air-cells of the Lungs in Children. By George A. Rees, M.D. London. 1850.

The disease here briefly noticed by Dr. Rees is still, we believe, imperfectly known to a majority of British practitioners. It consists in simple occlusion of the pulmonary air-cells, without any inflammatory or other deposit. This affection assumes two forms: one is a persistence of the fœtal condition of the lungs, and was first described by Professor Joerg, of Berlin. The second form, which appears to have been noticed for the first time by Dr. Rees, in 1838, comes on some time after birth, and is generally produced either by chronic bronchitis, or the breathing of a vitiated atmosphere.

Altered movement of the ribs during respiration (the ribs during the inspiratory effort moving inwards or backwards, instead of outwards) is *the* pathognomonic symptom of the disease. Besides this characteristic sign, we have generally a troublesome barking cough, habitual and peculiar dyspnœa, emaciation, palpitation of the heart, and contraction of the chest, giving rise to deformity.

The treatment of atalectasis under its second form should mainly consist in hygienic measures. The lung is not diseased, it is merely in a state of collapse. Removal to a pure air is, therefore, an indispensable condition. The child should be kept in a recumbent position, in order to assist expansion of the chest. The diet must be dry. The internal treatment may be thus summed up: secure a free action from the skin and kidneys, relieve the congestion of the hepatic vessels, and, whenever it is possible, administer a tonic.

Eight illustrative cases are appended to Dr. Rees's pamphlet, which is a valuable addition to our knowledge of children's diseases.

Observations on Cholera: together with References and Quotations from several of the best authorities of the time; calculated for the perusal of the general reader. By George Gwynne Bird, M.D. Swansea. 1849.

This is an attempt to explain, in a popular way, the various questions connected with, and arising from, an attack of epidemic cholera. Dr. Bird's work is well and clearly written; still we fear that, to the unprofessional public, it will be a "sealed volume." The most valuable portion of the treatise is that devoted to prove, that the liability to, and mortality of, cholera may be greatly diminished by proper sanitary regulations of a general nature. This proposition, indeed, holds good of all epidemic diseases, though it has been unaccountably neglected, not only by the public, but by the Profession itself. It is a waste of time to root up certain weeds, unless we improve the condition of the soil whence they spring. Plague has been thus eradicated; why not cholera, yellow fever, and typhus also? As for treatment, Dr. Bird seems to place chief reliance on half-hour doses of calomel. He does not allude to the saline method, which, in every sense of the term, may be called the popular one.

Statistical Reports on the Health of the Navy, for the Years 1837 *to* 1843, (*both inclusive.*) Part I. South American, North American, and West Indian, and Mediterranean Stations. By Alex. Bryson, M.D., R.N. Folio. Pp. 328. Ordered by the House of Commons to be printed, June 28, 1849.

The authorities of the Admiralty have shown a just appreciation of the talents displayed by Dr. Bryson in his invaluable "Report on the Diseases of the African Coast," by entrusting him with the preparation of a blue book, on the health of the navy, the worthy successor of the Reports issued in 1838 and 1840 by Dr. Wilson. To a nation so essentially maritime as England, there are few points connected with sanitary measures of so much importance as the health of the seamen who navigate the seas in the royal navy, and who fight her battles.

> "Much has been done, but more remains to do."

This is clearly shown by a perusal of the important and valuable volume before us. That much has been done is proved by the present state of the navy as compared with what it was in the time of the older commanders, some fifty years since, as regards ventilation, the food supplied the crews, the attention paid them when sick, the medical comforts,—technically so called,—and many other matters. Some of the most fearful diseases, by which our shipping used to be devastated, are now rarely to be met with; at all events, very rarely in the horrible forms in which they used to be encountered. That many diseases, however, of great severity and danger, still at times infest the navy, is shown by the records

(a) A few copies of this book had been issued under the title of "The Unity of Nature," when it was discovered that a similar title had been given to an excellent but very different work, very recently published, in which Mr. Pooley, of Cirencester, has embodied some posthumous papers of Mr. John Warren Howell, of Bath. The author, therefore, has caused the original title-page to be cancelled; and he wishes it to be understood, that the work now called "Proteus; or, the Law of Nature," is the same as that which was originally published as the "The Unity of Nature."

of the medical officers respecting vessels on the African and West and East Indian stations. There, at times, vessels in Her Majesty's service lose the services of a large part of their crews through the ravages of fever, generally of typhus icterodes; ravages that might in a great measure be prevented by proper precautions, more especially by the commanders putting to sea, and running to a colder climate as soon as the disease breaks out. This, however, which might be the salvation of many lives, the imperative nature of the naval regulations prevents, until the vessel has become almost a wreck, as far as the health and services of the crew are concerned. While such a state of things continues, no one can say the naval service is fully efficient, and that no additional attention is necessary to sanitary measures.

With regard to the more immediate subject of this notice, it must be evident that a blue book like the present neither admits of a critical review nor of analysis. It must be read and studied to be appreciated, and we would strongly urge on all our legislators and naval medical officers to study closely and ponder deeply over every page of its contents. Dr. Bryson has executed the task allotted to him in a manner that redounds greatly to his credit. If there be, as we trust and are sure there are, in the navy, many more such diligent and talented officers as himself, it is greatly to be regretted that their reports on the healths of the crews, teeming as they must be with valuable facts, should be a sealed book for the profession and public, and left to moulder away on the dark and dusty shelves in the offices at the Admiralty.

The Sumbul: a new Asiatic Remedy against Nervous Disorders, Spasms of the Stomach, Cramp, Hysterical Affections, Paralysis of the Limbs, and Epilepsy. By Dr. A. B. Granville, F.R.S. London. 1850. 12mo.

Dr. Granville is favourably known to the profession and the public by his endeavours to introduce into the materia medica of this country some remedial agents of considerable value; and he now confers another benefit upon society, by making us acquainted with a singular vegetable, which is reported to be endowed with surprising properties, and possessed of great efficacy in the relief of some of the most acute and painful disorders. The name of this substance, or plant, is Sumbul, or Samboul, according to the introduction of the intermediate vowels common to Asiatic languages; and our attention has been directed to it, in the first instance, by its general and successful employment in cases of malignant cholera in the Russian dominions.

We have no information respecting this plant, and know not even to what family it belongs. A specimen of the root, shown by Dr. Granville to Mr. Savory, of Bond-street, excited that gentleman's curiosity; and he, on this as on some other occasions with which we are familiar, lost no time and spared no expense to obtain possession of a drug which was, from report, likely to be beneficial to his fellow-creatures. In this respect he was successful; but less so in his endeavours to gain any description of, or particulars relating to, the plant itself. Mr. Pettigrew, to whom a specimen was shown by him, applied to Dr. Wallick, Sir William Hooker, and others eminent for their knowledge of botany, for information respecting it, but without success. The former gentleman, whose labours in his department of science in the east are so well known, possessed no acquaintance with it, and supposed that its strong musky odour might arise from a practice common with the Chinese, that of placing their drugs along with musk, camphor, &c.; thereby communicating to them apparently the qualities known to belong to these substances. Another learned botanist, the keeper of the Royal Gardens at Kew, thinks it looks like the tuberous root of some monocotyledonous plant, but of which he cannot form any just idea. He, however, suspects the plant to be Chinese, and that the scent might be given artificially. The strong musky odour of the root has, however, both by Dr. Granville and Mr. Savory, been ascertained to be inherent in its substance, and capable of extraction from every part of its mass, imparting to the tinctures which have been made from it an exceedingly powerful flavour. Dr. Granville describes the sumbul as a "single, thick, homogeneous root, from two to three, and even four inches diameter, circular sections of which, having a yellowish white fibrous look, and from an inch to an inch and a half in depth, are brought into the Russian drug-market at Moscow, through Kiatka, from the centre of Asia." Its *habitat* is considered to be Bucharia, a district to the north of Mount Thibet; it has, however, by some been stated to be the produce of Trebisond, and by others ascribed to Persia. Nothing is satisfactorily known respecting its locality, or the character of the plant itself. Dr. Granville thinks it probably an umbelliferous aquatic plant, or at least a lover of humid soils and the banks of rivers. The disorders to which it is applicable are those of the nervous system. Dr. Todd has successfully employed it in one case of epilepsy at the King's College Hospital. Mr. Pettigrew has relieved a few cases of sciatica and neuralgic pains by its exhibition; and Dr. Granville's employment of it in cases of paralysis of the limbs, hysteria, &c., appears, from the pamphlet before us, to have been attended with similar advantages. Its use must be extended to many more cases than have hitherto been the subject of its experiment before we can be enabled to form any opinion as to its real value as a remedy for the diseases for which it has been proposed; but the effects attending the few instances in which it has been employed, have been certainly such as to induce us to recommend it to the notice of practitioners in general. It can be very conveniently administered in the form of tincture by itself, on a lump of sugar, or in any diluent, and it is not disagreeable. The reported effects of its employment in collapse cholera are given by Dr. Granville in the pamphlet, where also are stated its chemical and pharmaceutical peculiarities, together with the analyses which have been made of it by Dr. Reinsch, Dr. Schnitzlein, and other German chemists; and to these statements we refer our readers for more particular information.

Bed-side Sketches. Thoracic Consumption. By J. C. Hall, M.D., Sheffield. Pp. 40. London. 1850.

We regret that the usages of weekly Journalism will merely permit us to acknowledge the receipt of this reprint from the pages of a respectable contemporary. We cannot, however, refrain from expressing our anxious desire that Dr. Hall should collect these very practical papers, and publish them as a separate volume. We are very sure they would be acceptable to the profession.

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1. *Cases illustrative of the Cure of Consumption and Indigestion.* By C. Calvert Holland, M.D., Lately Physician to the Sheffield Infirmary, &c. &c. Pp. 104. London. 1850.
2. *Nature and Cure of Consumption, Indigestion, Scrofula, and Nervous Affections.* By C. Calvert Holland, M.D., &c. &c.

We shall review these works, with those of Lebert, Madden, and others on consumption.

Die Flora der Bodenseegegend. Von Dr. Höfle, &c., &c. *The Flora of the Lake of Constance.* By Dr. Höfle, Lecturer on Medical Botany in the University of Heidelberg. Pp. 175. Erlangen: 1850.

Nothing tends so much to the acquirement of a correct knowledge of the natural history of a country, as the co-operation of qualified individuals in collecting and recording the productions of their several districts. In botany we may thus obtain a considerable insight into the habits of plants, and become intimately acquainted with their geographical range and the soils which they affect; and in medicine likewise much good might be effected, and great light thrown upon the history of epidemics, if local registers were carefully compiled and generally circulated. It would be no unworthy task for the nation itself to effect so desirable a registration. Unfortunately, however, England is sadly behind her German brethren in these respects. We regret the purely botanical nature of Dr. Höfle's work precludes any lengthened notice of its contents in this Journal, and indeed it is not susceptible of much general criticism, being, as we have seen, the Flora of a particular district.

The plan consists of, 1st, a chorographic description of the district; 2ndly, its geognostic relations; 3rdly, the vegetation, embracing (1) the flora of the district considered apart and by itself; (2) the same compared with that of Germany and Switzerland in general, and with particular neighbourhoods as that of the Alps, of the Vorarlberg and Appenzell, Upper Suabia, the Suabian Jura, the Black Forest, and the Valley of the Rhine from Bâle to Bingen;

lastly, a catalogue of the plants of the Lake of Constance, with their habitats.

We strongly recommend Dr. Höfle's work as an excellent model for those who would follow the example of this very able author.

Instinct and Reason; deduced from Electro-Biology. By Alfred Smee, F.R.S.

It is exceedingly difficult to describe this work. The title does not convey any idea of its contents. It is an *omnium gatherum* of a variety of things which have not the slightest connexion with each other, or with the supposed inquiry into Instinct and Reason. The fittest title would be, the Autobiography of Mr. Smee, from boyhood to his present ripened age, exhibiting his talents, propensities, and tastes, which appear to differ little from those which characterise the bulk of mankind.

Under the head of "Perverted Reason," we have a long description of his old friend the *aphis vastator*, his assigned cause of the potato disease: we have also in the work, an elaborate account of different kinds of bread, blasting by electricity, the calotype club, deaths from cholera, truth of Christianity, qualities requisite in clergymen, Cotton's weighing machine, the Daguerreotype, description of the daisy, Daniell's battery, artificial hatching of eggs, qualities required in engineers, Exchequer tallies, foolometers, gas-light, gilding by electricity, gun-cotton, delusions of homœopathy, ventilation by means of heat, defeat of Judaism, qualities requisite in lawyers, life assurances, fallacy of Mohammedanism, detection of the Mannings, fallacy of paganism, qualities required in physicians, necessity and efficacy of prayer, basis of religion, Staite's electric light apparatus, the steam engine, characters of stones, characteristics of vegetables, supply of water to towns, Weekes' *Acarus*, and a thousand other subjects which are touched upon, though they have not the slightest relation to the inquiry concerning Instinct and Reason. These are pegs on which Mr. Smee hangs a vast amount of heterogeneous materials, to swell out his work to 320 pages.

Science, in all its departments, is, in the hands of Mr. Smee, a mere plaything—he soars easily and gracefully with Newton and Laplace through boundless space—with Locke he enters profoundly into the investigation of mental phenomena; but in this branch of knowledge he far outstrips his master. With Cuvier he treats elaborately of the animal creation; with Brown, of the wonders of the vegetable kingdom. In fact, his understanding is of such an extraordinary character, that it comprehends everything at a glance. Our only regret in reading his book, is, that he allows so much knowledge at once to escape. It is like directing too strong a light upon the eye. It confuses and embarrasses the mind. We would advise him on the next occasion to be more parsimonious of his mental riches, and that with which he favours us shall display some relation to the subject which he professes to discuss. He is a wonderful man, but he would be more wonderful if he would follow our advice, which is kindly and gratuitously given.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

EXPERIMENTS ON THE MOVEMENTS OF THE HEART.

The duration of the particular acts of cardiac movement cannot be estimated by the pulsations, since the pulsatory curves are functions of the thoracic movement. To this fault the nature of the arterial stream adds a not less considerable one. Hence we are driven to direct observation on the heart itself. After having once succeeded in laying bare the hearts of mammalia so advantageously as to preserve them in lively and undestroyed movement half or a whole hour, it becomes easy to indicate the changes produced by the *beat* with the aid of a graphic apparatus. This is accomplished in the following manner:—

The denuded heart is placed on a plate of alternated tinfoil and sticking-plaster, of similar form and sufficient strength. Two threads attached to the upper angles of this plate, cross over, and fix the roots of the heart, and thence pass to the board on which the animal lies. Two others fasten the plate inferiorly without being attached to the organ. Thus the heart is so fixed as to be unaffected by the movements of artificial respiration.

The intensity of the beat is measured by a nicely-balanced lever, near to the fulcrum of which a delicate rod depends; the lower extremity of this carries a small transverse plate, concave inferiorly, so as to fit the surface of the heart on which it rests. Thus any movement communicated to this perpendicular rod by the heart carries the extremity of the lever through a much greater space.

But this movement of the end of an unyielding lever describes, of course, the arc of a circle. By making the end pass under and raise the transverse limb of a vertical sliding-rod, these arcs are reduced to chords, or the circular movement is reduced to a vertical one.

The last perpendicular rod carries a prepared pen at right angles to it. The point of this instrument impinges on a sheet of paper wound around a vertical cylinder, which, by means of a weight and a pendulum, revolves at an uniform speed. Thus, the beats of the heart are reproduced on the cylinder as a system of continuous curves: the heights or ordinates of which express their intensity; the breadths or abscisses their duration.

The faults of this apparatus, and the means of obviating them, are as follow:—

1. In seeking the proportional durations of systole and diastole, we are, in reality, seeking to certify the uniform times of operation of the nervous system which excites them. Hence, as the heart consists of co-ordinate parts, we must either find their several times of action, or assume them to be simultaneous. The complication and minuteness of the cardiac elements render the first impossible; while no proof of the absolute simultaneousness of their contraction has yet been attained. In spite of this deficiency, the author believes himself to have proved, that the proportional times, which Volkmann and himself formerly stated, are incorrect. For it is evident, that any deficiency in the simultaneous character of the systole would shorten the estimated diastole; so that if the curves had indicated the systole as longer than the pause nothing could have been concluded. But in most instances the contrary obtains, and hence, the facts revealed by this method contradict the general validity of Volkmann's conclusion.

2. In order that the lever may accurately represent the particular acts, it is necessary that it should always be in close contact with the heart, and that its ascent and descent should always and exactly correspond with the systole and diastole. Hence the arm which rests on the heart should be slightly overweighted, and thus it results that,

a. The heart, during its contraction, never forms a completely round transverse section. If this happened, the circle formed at the beginning of systole would, by its duration, be further narrowed in all diameters, and so the arm would fall, and give rise to an error in favour of the duration of the pause.

b. The rod is thus prevented from ascending during the influx of blood produced by the systole of the auricle.

c. Finally, the separation of the lever from the heart is thus prevented; and, if the contractions are so vigorous as to render even this means insufficient, the rod must be fastened to the heart by a short loop.

It will be seen, that, though the abscisses of the curves exactly measure the duration of the acts, yet their intensity is not so correctly certified by the maximum of their ordinates. For the instrument only takes cognizance of the fact, that during systole, a perpendicular section of the heart in the long axis would be changed from an ellipse into a circle; and thus, the greater the previous deviation from the circular form, the more powerful would be the contraction. But though the impulse exhibits a function varying with the degree of contraction, yet the latter has a portion which is in no accordance with it, namely, the reduction of diameter in the circle once produced.(a) Hence the results thus obtained are but vague as regards the intensity of con-

(a) [It seems to us that, as the abstracted impulse would occupy time, both abscisa and ordinate would be equally affected. For if the heart returned through the circular form, the diastolic or descending limb of the curve would be broken by a short ascent previous to the long one produced by the assumption of the elliptical form. But this is not the case on the author's figures; and, as the united time of the two actions is unaffected, whatever is taken from one must be added to the other: or the straight line, which is the sum of the abscisses, will be variously divided according to the height at which one limb is reflected into the other.—Ed. *Med. Times.*]

traction, the more so, that the normal relations of the sections of muscles themselves to that of the whole heart are quite unknown.

The author then exhibits the deficiencies of Hales's measurements from the lateral pressure of an artery, and shows that little reliance can be placed on them from the numerous circumstances of the vessel and the heart, of which they take no account.

The following are the Author's chief results :—

A. Irritation of one vagus, which, according to Weber, causes irregularity of the heart-stroke, produces exactly the same result as irritation of both, and elongates the pauses of the whole heart. This peculiarity may be explained by the numerous plexuses which the vagus forms prior to its entering the organ. Each nerve exchanges numerous filaments with that of the opposite side.

B. Irritation of the vagus at different points produces different results.

a. If the nerve be irritated *above its entry into the heart*, it immediately and always passes at once into diastole. This is especially well seen when the nerves have been previously cut across. At the instant of commencing irritation, the previously rapidly following systoles are interrupted by a long diastole. This behaviour suffices to show, that the vagus must be regarded as an apparatus, through the activity of which the rhythm of the heart is elongated as to the period of rest.

Immediately after the beginning of irritation, the following are the main deviations which obtain :—

1. After the first long diastole one or more very powerful contractions, followed by a series of gradually diminishing intensity.

2. The first long diastole is interrupted by a single powerful stroke, which is followed by a diastole enduring many seconds.

3. The first long pause is followed by a series of slower and less intense contractions.

4. The first diastole continues many seconds, without being preceded by any contraction.

The first of these probably only occurs where irritability is weak : the second and fourth are very frequent, and about equally so : the third was only found once in very numerous observations.

The author confirms the observations of Weber, which showed the property of the vagi in quieting the heart to be greater the less the irritability of this organ was weakened ; and hence he is obliged to explain the intense strokes in 1 and 2, as due to the motive power in the heart itself being too great to be checked at the very onset of irritation.

By continuing, the irritation-movements re-appear. In respect of their rhythm, they are reducible into three groups.

1. A series of movements re-appear, such are seen on the commencement of irritation.

2. Here, after the long pause, the strokes gradually become frequent, while the pauses decrease. The decrease is not uniform ; but, in most cases, the curves appear so alike as to have held out fallacious hopes of some empirical law being deducible. There is, however, no simple proportion between the duration of irritation or the weakening of the nerve on the one hand, and the quickening of the pulse on the other. This is well seen in the following variety.

3. The third kind of rhythm in this stage of irritation in the rabbit ; here, after long irritation and pretty equable but long pauses, the heart-strokes suddenly re-appear with great frequency. This, like the preceding, arises from the change effected by the electrical current on the portion of nerve included between the poles, and is obviated by arranging the apparatus so as continually to select fresh segments, when the first results are reproduced.

After their rhythmus, the intensity of the movements is of fundamental consequence.

1. The movements at the commencement of irritation are in all cases more intense than those previously produced by section of the vagi.

2. Those which, in the dog, replace the first pause are less intense than these ; whether they exceed those of section, the author cannot at present estimate.

3. Those which occur at later stages of irritation, in the same animal, are clearly more intense than those which precede irritation ; and, unlike the latter, which are uniform, they gradually increase in strength. This, the rule in dogs, does not obtain in rabbits.

However intense the strokes during irritation, they have little valid effect on the stream of blood, the lateral pressure of which is much lower during their action than before—on an average, little more than half.

The sequel of irritation of the vagus is next treated of. The observations teach that these are of two kinds, according as the irritation has continued a longer or a shorter time. In the latter case the cessation of irritation is followed by one or more intense contractions, with longer pauses between them, after which the intensity and rapidity of the strokes returns to its condition before irritation. During these more intense and quicker strokes, the average of lateral pressure is considerably increased. But in the case of longer irritation, the irregular strokes of the heart often continue three minutes after the removal of the galvanic poles ; and the lateral pressure fell in one instance to about one-tenth of its amount at the end of irritation. Immediately after this, the rhythmus passes, by some intense strokes and longer pauses, into its condition prior to irritation. But now the heart strokes are more valid, as shown by the increase of lateral pressure. These irregularities are best explained by regarding the heart as consisting of independent elements, which, although during irritation they may have a definite relation to the normal movements, are yet capable of combining their actions in the most manifold way.

So that, looking at the results of irritation of the vagus, it may be generally asserted, that this nerve prolongs the pauses as Weber has stated ; but the experiments of the authors add, that it does not weaken the intensity of the special cardiac movements ; or, so to speak, does not hinder the collection of irritability.

b. If the cardiac nerves of the frog's heart be irritated *in their course on the auricle*, with the precaution of bringing the very fine conducting wires as nearly as possible into contact, the ventricle is brought to rest, while the auricles and vein sacs still pulsate with no marked alteration of their pauses.

c. It is important to observe that, during the pauses produced by irritation of the vagus, every mechanical or electrical influence applied to *any part whatsoever of the heart* is still capable of producing an energetic movement of the whole organ. This shows that the nerve is incapable of suspending the reflex movements, while it indicates that even the application of the lever to the heart renders it impossible to place much reliance on the subsequent changes of the cardiac rhythmus.

From the observations on the forces which produce the systole, it is concluded as follows :—

That the most violent electrical irritations are incapable of throwing the heart of any animal into general tetanus ; even where, applied by means of the two poles to the opposite extremities, they throw the whole body into this state. A limited tetanus only is produced around the electric poles, in the shape of a small white elevation ; and, together with this permanent local contraction, occur extraordinarily rapid and irregular movements of the heart, of very slight intensity. In these movements the special anatomical elements have lost their relations to each other, and no longer contract simultaneously ; so that, in respect of rhythmus and intensity, they are altogether mutually confused. In one instance, 604 strokes of the heart occurred in one minute. These movements outlast the irritation, and pass into the normal heart-stroke by a gradual subsidence of one part after another into a state of rest, till a general pause ensues, which is shortly followed by a strong general movement of the heart as the commencement of the natural rhythm.

These experiments sufficiently show that the heart cannot be regarded as including a common physiological central organ, even for the most limited extent. The tetanic heart is utterly invalid for circulatory purposes, for all the simultaneous movements necessary for this purpose require induction of the different parts. (co-ordination ?) And the impossibility of completely stilling the heart by the vagus, seems to point out, that to produce the cardiac movement would require that the electric stimulus should be applied to two different systems of nerves,—the preponderance of either determining systole or diastole.

The local tetanus, and the rapid heart-movements, appear to be contrasted with each other. The tetanus is best seen in cold-blooded animals, and is highly analogous to the effects of direct muscular stimulation. It can be made to take directions incompatible with those of the nerves in the muscle. And the application of the electric stimulus to the

nerves of the heart themselves, however long continued, will not produce any enduring contraction; while, in the case of the other nerves, a continuous tetanus results. This renders it probable that the local tetanus and the rapid movement have different sources.

Strychnine is just as incapable of producing tetanus of the heart as electricity. In introducing dissolved or dry strychnine, the stream of blood in the auricle is interrupted, and its walls fall together in a triangular form. After the application of strychnine the heart contracts rapidly and frequently, and then remains in this three-cornered shape; but, by fresh irritation, one, two, or three movements may be subsequently produced.

As to the share taken by the ganglia in the production of the cardiac movements nothing can be said. Section below the transverse fissure does not hinder movements on direct stimulus, while the last visible parts of the nerves are still accompanied by ganglia.

The circumstances within the nervous system, and corresponding to the motive powers of the heart, seem to be of two kinds. That of the vagus can only be thus far expressed,—that it is a tension of power and not a destruction; a fair deduction from the fact that, on the end of its irritation, a very intense movement breaks out. But the vagus is not the only agent of this tension or collection of power, since neither the section of these nerves, nor subsequent stimulation of the heart, altogether destroys the pause or the valid heart-stroke.

Finally, the circumstances which influence the motive power are chiefly these:—

1. Duration of the pause. This is shown by comparing the strength of the beats before and after the irritation of the vagus, but no law of proportion is at present deducible.

2. A certain degree of heat. Thus, in the heart of a mammal, if its beats be interrupted, the warmth of the hand will restore them.

3. Blood, even though cold and belonging to a different animal, will renew contraction when injected into the coronary artery.

4. The movement itself appears to exert an important influence on the production of an irritable condition. A piece of frog's heart, which has lost all movement, may be excited to a continuous series of rapid movements by producing some contractions by mechanical contact. This is the more remarkable when we recollect that movement exhausts irritability. If we add to it this singular observation, that the kind of movement once produced endures through a pause, *i.e.*, that the operation of the irritation is not exhausted by an intervening rest, we may approximate to an explanation, by supposing that the nerves of the heart have functions which bestow the possibility of the movement as well as really produce it; or, in other words, that the apparatus which produces movement in the irritable heart, as well as the nervus vagus, is able to fix itself in a certain condition produced by any influence, and that then the mode and intensity of the cardiac movement are determined by this apparatus conjointly with irritability.

As regards the production of isochronous contraction, the authors incline to attribute it to local induction from any particular point to neighbouring ones, under like circumstances as to irritability. The counter opinion regards it as due to a uniformity of irritability on all the nerves. The latter is corroborated by the simultaneous contraction of two separate parts of the ventricle. But this is rarely the case; often irritability and contraction are in different ratios; and contractions produced by the same cause and under similar circumstances are devoid of an isochronous character.

We no longer seek the source of the rhythm and sequence of the heart's movements externally; *i. e.*, in the course of the blood, or in the influence of one part on another. In a really irritable heart, local stimulus to any part produces the normal sequence of movement, and the attribution of it to the particular distribution of the nerves is equally erroneous. Rhythm survives in an isolated bit of heart. The anatomical possibility of reflex movement applies to all parts of the nerves of the heart. While, finally, by weakening the nerves with opium, we may so affect the rhythm as to render it alterable at will: irritation of the auricle produces the normal rhythm in which the contraction of this part goes first, and irritation of the ventricle exactly inverts it.

In conclusion, the author adduces several tables of the relative duration of the systole and diastole of the rabbit, both before and after section of the vagi. It results from these that the duration of the pause is no function (*i. e.*, no multiple or sub-multiple) of that of the systole or beat.—*Abridged from M. Hoffa and C. Ludwig, in Henle and Pfeufer's Zeitschrift. Band IX. Heft I. Pp.* 106—145.

ON ANÆMIA FROM DIMINUTION OF ALBUMEN IN THE BLOOD, AND ON THE DROPSIES WHICH RESULT.

By MM. BECQUEREL and RODIER.

Analysis.—That peculiar condition of the blood arising from diminution of the globules is generally known under the name of anæmia, and its symptoms, causes, &c., have long been well described. But there is another modification of the blood, consisting in diminution of the albuminous principle. This change was first pointed out by Gregory, Bostock, and Christison, in a certain number of cases of Bright's disease, and the same results were observed in France by MM. Rayer, Andral, and others. Little more, however, was noticed respecting it beyond its coincidence with granular disease of the kidney. To throw further light on the subject is the aim of MM. Becquerel and Rodier in the present memoir.

The normal proportion of albumen in 1·000 parts of human blood may be set down at 80. It may vary from 75 to 85 without being accompanied by any symptoms of disorder; but, whenever the proportion falls to 65 or lower, a morbid condition, attended by certain symptoms, may be considered to exist.

The circumstances under which diminution of the albumen may occur permit us to distinguish two forms, the acute and chronic.

The Acute Form.—Under this head are comprised several forms of acute dropsy, which were formerly regarded as essential, but which must now be attributed to anæmia from diminution of the albumen. The authors relate several of these cases, which may be here noticed in a summary manner. The first referred to a young woman attacked by anasarca, with fever, and slight ascites. There was a well-marked *bruit de souffle* on auscultating the heart. The urine gave no trace of albumen. The disease soon yielded to bleeding and purgatives. On examining the blood, it was found that the globules were diminished, and the proportion of albumen also; this latter gave only 58·89 in 1000 parts of blood.

In another case similar to the above, but where the febrile symptoms were less, the albumen had fallen to 61·74, while the globules were likewise diminished.

In a third case, the proportion of albumen had fallen to 37·26; and this was an obstinate one, the patient remaining anæmic for a long time after the removal of the dropsy.

Diseases of the Heart.—When these diseases have arrived at a certain point they are always attended by a certain degree of cachexia, manifested by the debility of the patient, the yellow colour of his skin, and the rapid increase of the dropsy, which had arisen at first from a mechanical obstruction. The researches of the authors show that this cachectic state invariably coincides with a remarkable diminution in the proportion of albumen in the blood. Thus, fifty-one patients labouring under organic disease of the heart were bled. In 26 the albumen was found in normal quantity; in 25 it had fallen to 66, or even 53 parts in the 1000. In the former series of cases the patients remained free from cachectic symptoms: in all the latter these symptoms were very predominant.

Bright's Disease.—Here the diminution of albumen is a constant phenomenon. In one case it had fallen to 46 in the 1000.

Symptoms.—These will vary according to the acute or chronic stages. In the *acute* stage the characteristic symptoms are—general paleness, with a slight yellowness of the skin—general dropsy and debility. There is often, but not necessarily, fever. A *bruit de souffle* often accompanies the first sound of the heart; but this depends on diminution of the globules, which may co-exist with the diminution of the albumen.

The *chronic* form is much more frequent; its chief signs are—a tendency to the production of anasarca, without the presence of albumen in the urine; the albumen is also absent in acute cases. The discolouration of the skin, and gradual loss of strength, are also among the principal signs.

Diagnosis.—It is not always easy to distinguish cases of anæmia, arising from diminution of the albumen, from those produced by other causes; but the following remarks will

assist in the diagnosis. Let us take, for example, the following case:—A patient is attacked by anasarca without any evident cause, or perhaps from the effects of cold. The face, at the same time, becomes pale, slightly yellow; there may be some fever, and weakness ensues. Now, such cases can only arise under three circumstances. They may be connected with Bright's disease. Here the presence of albumen in the urine, in large quantities, at once reveals the cause. Or the patient may labour under acute endocarditis, accompanied by dropsy. The diagnostic signs of this affection are the physical signs furnished by the heart, and the increase of fibrine in the blood, while the globules and albumen remain unchanged. Lastly, the disease may depend on the cause already noticed, viz., diminution of the albumen; and here we may infer the cause from the absence of albumen in the urine, the absence of physical signs of heart disease, and from analysis of the blood.

A question, however, more difficult to decide, is, whether the dropsy be the cause or effect; whether the primary cause of the disease has impoverished the blood in the first instance, and thus produced the dropsy: or, whether the dropsy has not given rise to the diminution of albumen. That the dropsy is an effect, not a cause, we may conclude from the fact, that diminution of the albumen does not accompany extensive dropsy arising from cirrhosis or obliteration of the veins.

In chronic cases the diagnosis is always easy whenever the patient exhibits signs of general cachexia; and we have no reason to suspect mechanical obstruction. The most difficult case may be thus laid down—anæmia is the prominent symptom, but its cause is not very clear; the patient labours under dropsy; the face is pale and yellow, and no albumen is found in the urine. What is the cause of the dropsy in such cases? Not Bright's disease, nor organic disease of the heart; for we have no corresponding physical signs. It is therefore anæmic dropsy; but not from diminution of the *globules*, as has been generally taught, nor from a chlorotic state. The real change, as the numerous experiments of MM. Becquerel and Rodier appear to have proved, is a diminution of the albumen in the blood.

Treatment.—In the acute stage the treatment is simple and well-known; general bleeding, followed by purgatives and diuretics. When the effusion has disappeared, the patient must be submitted for a considerable length of time to a tonic regimen. In chronic cases, arising from bad food, loss of blood, marsh fevers, &c., the general condition of the patient requires more attention than the mere dropsy, which is a secondary effect. Hence bark, a generous diet, change of air, and other tonic remedies, are the main agents on which we are to rely. Preparations of iron can only be useful whenever the diminution of albumen is attended by diminution of the globules.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

MEDICAL JURISPRUDENCE.—TEST OF CEREBRAL MATTER.

Since the revolution of February M. Orfila has kept completely in the back-ground, and appeared to have abandoned legal medicine altogether; but he came out with a capital memoir at the last meeting of the Institut, on a point which had not hitherto been examined by any preceding medical jurist. A person had been assassinated last year. On the blouse of the suspected assassin was a spot which appeared to be formed by dried cerebral matter, but up to that period no medical jurist had ever been called on to decide whether a stain on a garment or instrument, &c., was or was not composed of dried cerebral matter. MM. Orfila, Chevreul, and Donné, were therefore appointed to decide this delicate matter. M. Donné was absent; M. Chevreul declined, and the whole task fell on M. Orfila. The matter submitted to him did not exceed three-tenths of a grain, and medical works contained no information whatever on the subject.

M. Orfila was thus compelled to institute a set of original experiments, from which he draws the following conclusions:—

"Sulphuric and hydrochloric acids act in a peculiar manner on cerebral matter. They serve to distinguish it from every other part of the human body, and from all other substances, as white of egg, cheese, butter, &c., which are capable of producing on garments a dried and somewhat prominent spot. Sulphuric acid produces a violet colour with cerebral matter; while hydrochloric acid, after several days' contact, gives a dirty grey colour, slightly bordering on violet, which afterwards passes to a Malaga red, without ever giving the slightest trace of blue. It is impossible to avail ourselves of the presence of phosphorus in cerebral matter as a test, because the quantity of that matter on a spot would hardly ever be sufficient; while white of egg and caseum likewise contain phosphorus."

But the microscope furnishes us with a still more certain means.

"A microscope of 470, or better still, 580 to 600 diameters, affords a certain means of distinguishing cerebral matter from every other organic substance, and that even when the cerebral matter does not exceed one-fiftieth of a grain in weight.

"By treating with a concentrated solution of sulphate of soda, a mixture of blood and brains, such as might be supposed to exist on an instrument with which the skull had been fractured, the blood globules are preserved, and the microscope will at once detect both the cerebral matter and the globules of the blood."

The memoir of M. Orfila was listened to with the deepest attention and interest, but excited no remark, because the accuracy of his conclusions appeared to admit of no doubt.

CURE OF STERILITY.

This is a scabrous subject, as the French say, and delicate to treat in a journal like the *Medical Times*, which is in every one's hands; but the truth must out, even at the risk of seeing it appropriated by the quacks. M. Raynand has succeeded in curing two cases of sterility by gradual dilatation of the neck of the uterus with wax bougies. Six months were required to effect the dilatation, after which the ladies conceived. Some of our friends may, perhaps, convert their specula into a softer kind of dilator, after this announcement, and add another feather to the tail of intra-vaginal explorations.

A HORN.

But there are queer things sometimes on the forehead, as well as in darker regions. M. Grisolle amused the Academy, in no small degree, by the exhibition of a horn, exactly like that of a he-goat, which grew from the forehead of an old woman 70 years of age. It was no less than 5½ inches long, and had taken only three years to grow. It was, moreover, a most obstinate kind of horn; for though it had been removed some twenty times in the space of thirty years, it always re-appeared; and finally, when cut off with a ligature, it produced an erysipelas which cut off the patient also.

M. GAY-LUSSAC.

M. Gay-Lussac was the chief ornament of the celebrated school founded by Laplace and Berthollet, and which likewise produced Poisson, Dulong, and Fresnel. The chief characteristic of this celebrated school was the manner in which its pupils availed themselves of extensive knowledge in mathematics, physics, and chemistry for the elucidation of the phenomena of nature—a combination which gave rise to the most brilliant results.

The first act of Guy-Lussac's scientific life was his celebrated aërial voyage, in company with M. Biôt. The idea originated with a republican statesman, M. Chaptal, in the year 12 of the Republic. The ascent took place from the garden at the back of the Arts and Trades Conservatory. A height of 12,000 feet was attained; and, among other important observations, the adventurous travellers ascertained the important fact, that the magnetic power of the earth underwent no sensible diminution at that distance, and that the excess of free electricity in the atmosphere went on increasing, according to a fixed law, and up to the same height. In a second ascent, made by M. Gay-Lussac alone, when a height of 21,000 feet was attained, the subject of our notice discovered that the atmosphere, even at that great distance from the earth, presented no difference whatever from the air we breathe. Soon after this, Gay-Lussac commenced, under the auspices of Berthollet, the long career of scientific research which he pursued with such

success. From 1805 to 1808 he was engaged, in conjunction with Humboldt, in observations on the intensity of the magnetic current in France, Switzerland, Italy, and Germany. In 1808 he discovered the law which regulates the combination of gaseous bodies; and soon afterwards, being commissioned by Laplace to verify experimentally his theory of capillary phenomena, M. Gay-Lussac executed a series of delicate experiments, in which every point of the theory was verified with astronomical precision. In those times of republican simplicity, the greatest men were not ashamed to ask assistance from rivals, and no petty jealousies impeded the progress of science.

In 1813 M. Gay-Lussac published his celebrated memoir on Iodine. An obscure manufacturer of saltpetre had discovered, in the residue of the substances employed by him, what appeared to be a new body. Unable himself to examine this substance, he had given a small bottle of it to a chemist for examination, but want of time prevented the latter from making any experiments. Sir Humphrey Davy arrived at Paris, and the bottle containing the mysterious substance was confided to him. This aroused the national susceptibility of Gay-Lussac. "If any honour were to be gained, why allow a foreigner to reap it?" He therefore obtained some more of the substance from Courtois, and in a few weeks produced one of the most remarkable works of which chemistry can boast. In 1815 M. Gay-Lussac published the results of his researches on prussic acid and the discovery of cyanogen, and soon afterwards became associated with his friend Thenard, in a series of researches, all of a practical nature, and tending to practical results. Thus, in measuring the quantities of alkalies, he substituted volumes for weights—invented the chlorometer and the present mode of assaying silver. The centesimal alcoholometer was also of his invention—one of the greatest improvements in the manufacture of sulphuric acid likewise,—and a variety of other improvements familiar to manufacturers.

As a private citizen M. Gay-Lussac presented the rare combination of the highest intellectual qualities with solid virtues, which ensured universal esteem. His manner was rather cold, but he was far from being insensible to friendship, and his habits were at once noble and simple. His firmness and scientific probity, his disregard of all meaner considerations when compared with the progress of science, the immense energy with which he pursued an object, and his disregard of worldly honours, gave to Gay-Lussac the stamp of former times; knowledge alone appearing to connect him with the habits and bearing of his contemporaries.

He died on the 11th May last, after a lingering illness, from disease of the heart. M. Fremy, Professor of Chemistry to the Polytechnic School, will probably succeed him. The Home Minister has ordered that his bust, and that of M. de Blainville, shall decorate the Institut.

IRELAND.

The Provincial Colleges at present are lying up in illustrious repose, the new University, after its late throes in Galway, at its somewhat premature birth, requiring some little time to look about it. The Medical Charities Bill, having escaped the storm with Ministers, is again the theme of speculation, more particularly as it is now thought we shall not have the Lord-Lieutenant taken away. Many changes in the Bill have been suggested in Committee, such as doing away with the Board of Health altogether, and giving the entire control to the Poor-law Commissioners. Sir Phillip Crampton and Mr. Cusack have been lately in London; the former, it is generally hinted, is to be added to the Poor-law Commission. The Bill is to be before the House on the 12th, but those deep in the matter say it will not pass at all this session. The judges on circuit at least consider with the *Medical Times* that it is still merely in its *chrysalis* state.

DELIRIUM OF SCARLET FEVER.

Dr. Cathcart Lees has just drawn the attention of the profession to a particular form of delirium in scarlet fever, not perhaps hitherto well understood, at least not managed well as regards treatment, and which he seems to be of opinion differs scarcely at all from *delirium tremens*. Complications occurring in the course of scarlet fever, constitute perhaps the most important points in its pathology and treatment; every one's experience must have convinced him of this, as well as of the fact, that the amount of the scarlatina poison in the system is even itself modified by the facility with which these complications are got under and the general health of the system established; the struggle, so to speak, between the two depending very much on the existence of these complications.

In a very interesting monograph on scarlatina, which prevailed in Dublin from 1834 to 1842, written by Dr. Henry Kennedy, the point is alluded to also. Though not generally recognised in works on the subject, he says, "he considers the delirium in scarlet fever purely nervous; even when patients died with well-marked head symptoms, no morbid appearance was found in the brain to account for them." Convulsions and coma are described by Copeland, but I do not find that he has been aware of delirium in scarlet fever; anasarca too, curiously enough, he says, upon referring to authors, he can find no notice of, except in the clinical lectures of Dr. Graves. The frequency of scarlet fever in Dublin has afforded opportunities of studying it, not lost sight of; and I know of no work that gives us such excellent directions respecting this disease as the two Dublin works just named.

The first of the cases given by Dr. Lees is a very marked one of scarlet fever, occurring in an old gentleman aged 70, "accustomed to live freely but not intemperately." After the usual symptoms of sore throat, scarlet rash, &c., on the 4th day, he complained of his hands being swelled; had had a restless night; raved a great deal. Pulse small and quick, 104. He was ordered camphor and hyoscyamus.

On the 11th, (5th day of the disease,) the report continues, "had a very bad night; no sleep; raving constantly; face flushed; eyes suffused; tongue coated with a thick white fur; talks incoherently; tremor of hands; skin still red; pulse 104." Dr. Cusack now saw him, in consultation, and advised his wine to be increased to a pint of sherry in the 24 hours, and to have jelly and broth.

12th.—Very delirious all the evening; but after getting half-a-pint of sherry, in divided doses, fell asleep, and slept from 11 p.m. till 6 a.m. Still talking incessantly; great subsultus; pulse very feeble, 120; rash still well out. Ordered musk and ammonia, and the wine to be repeated. The report continues:—"Became much worse towards night; no sleep; incessant talking." Dr. Cusack now advised a blister to the neck, and a teaspoonful of brandy every hour in water. After the second day, he fell asleep, and awoke more composed.

13th.—Better. "To have cold water and brandy, and cold beef tea." He began to sleep soon after the visit; *slept quietly most of the day and night;* next day was quite sensible; pulse down to 88. He got quinine and claret in a few days more; and on the 28th went out, quite well, to drive into the country.

This peculiar complication of scarlatina, being manifestly unknown in general practice, will be an apology for giving these details so regularly. It is quite clearly a class of cases of no ordinary character. A second case, if possible worse, in which the raving and delirium were quite frightful, recovered quickly also on the patient getting sleep, induced by a large dose of opium (16 drops of *gutta nigra*). The case in every other way was treated like *delirium tremens*. The great point urged by the Irish school to support the system, at all hazards, in opposition to the old antiphlogistic method, is one of no little originality, as well as that other one, not less essential, of getting rest for the nervous system by sleep, even by artificial means.

LANCASHIRE.

Much that might interest your readers has lately occurred in this county, and this I shall take early occasion to notice. I may mention, however, that one thing has been done which it would be well to imitate in all large towns; I allude to the establishing of an Ethical Society in Liverpool. The rules are good, and well got up; but it is only in the working of a Society that we are able to judge of its regulations.

Last Wednesday fortnight, the fourteenth anniversary of the Lancashire and Cheshire Branch of the Provincial Medical and Surgical Association was held in the Medical Institution, and well attended. Dr. Edwards, of Chester, presided in the absence of Dr.

Duncan, the President of the Association. The report, read by Mr. Hatton, of Manchester, dwelt upon the Constitution of the Colleges of Physicians and Surgeons, and showed, that from local necessity persons were often obliged to practise the several branches of the profession, and that a third and inferior College of General Practitioners, to embrace such persons, would be unfair, and ought to be resisted. It also regretted that the Intramural Interments Bill was not extended to the principal provincial towns. After the report was read, among other matters discussed was the subject of military medical honours, and a memorial addressed to Lord John Russell from the Association was read.

The town is not under the influence of any special epidemic. There is little more than the usual run of scarlatina, measles, and slight continued fevers. We hear that in one district the small-pox has been rather prevalent. Some that have suffered have not been vaccinated, while others have. We have reason to fear, that the vaccination amongst the Irish is not sufficiently attended to. Is there no system to be depended on? According to the report of the medical officer, the number of deaths in the borough is exceedingly low, as compared with the corresponding month of last year, exclusive of cholera. The weather has been very changeable, and the temperature low for the season of the year. Our next report will have more new and satisfactory particulars than we are at present able to supply on this subject.

GENERAL CORRESPONDENCE.

THE USE AND ABUSE OF THE SPECULUM.

[To the Editor of the Medical Times.]

Sir,—Considering the numbers that joined in the outcry raised against Dr. H. Bennett, when advocating the use of the speculum, in the discussion that ensued after the reading of Dr. Robert Lee's paper, I am surprised that his challenge to prove the truth of his statements should have remained unaccepted. The same opportunity of judging as to the frequency and importance of the cases in which the speculum is used, is afforded at the Hospital for Women in Red Lion-square, where those gentlemen who are interested in the question will, I am sure, be treated with the utmost courtesy, if desirous of satisfying their own minds, and will have ample opportunity of testing the truth of the statements that have been put forth. Where this publicity is sought, and where the advocates of the speculum are willing to have their opinions fairly tested, it is much to be regretted, that a Committee has not been appointed to set some of the many questions connected with uterine pathology at rest. This is a question in which the profession is deeply interested; as it is very evident, from the extreme views of Dr. Bennett on the one hand, and of Dr. Lee on the other, and the numerous suggestions and instruments that are daily coming to light, that some authoritative opinion is needed. One gentleman sees ulcers frequently, another sees them not; one gentleman resorts to the speculum with the same readiness that he places a spoon on the tongue of a patient to examine the throat; another would use it in preternatural presentations; another would never use it. Another gentleman props up the uterus on a pronged instrument, much after the fashion of hanging one's hat on a peg, and apparently with as little fear of the consequences. Another thinks an instrument might be passed up into the Fallopian tubes, in certain cases of sterility, as if he were cleaning out the stem of a tobacco pipe.

Now, with all these distracting opinions put forth, it is high time that an effort should be made to decide what is valuable, and what is not; and, if we recollect that unfortunate woman is the sufferer, perhaps some may be found to cleanse this Augean stable. Of the shameful use that has been made of the speculum there is no doubt; and you, Sir, foreseeing, or aware of the evil, attempted, by your review of Dr. H. Bennett's book, to stop its growth. Dr. Robert Lee then came forward, but, unfortunately, he was too deeply interested a party to have the influence requisite for doing good, as it is not an unfair supposition that his practice may have suffered from the number of competitors in his own department; and, as he took an extreme view of the case, those who have found the speculum useful were not likely to disbelieve their own senses, much as they might join him in exposing the gross abuses that have tended to lower our profession by the employment of the speculum by unprincipled persons. But, in addition to this, I regret to say, that Dr. Lee's paper was disfigured by a personal attack upon Dr. Protheroe Smith, which, besides being misplaced, was unjust; so that, instead of gaining by it, Dr. Lee has certainly placed himself in the position of bringing an accusation which Dr. Smith, Dr. Moore, and Mr. Scott, have since entirely disproved. The mode of attack reminds me of Cicero's oration against Verres, when, having roused the feelings of the Conscript Fathers by an allusion to a criminal about to be put on his trial, he thunders forth,—"I mean Caius Verres, I demand justice of you, fathers, against this robber of the public treasury," &c. In the case alluded to by Dr. Lee, I regret that he did not refrain from naming the gentleman whose case it was, as he had omitted to name those who had been concerned in other cases; but, even with this unfortunate error of judgment, I hope much good may result from the paper, as the attention of the profession is now thoroughly aroused, and they will now watch with jealousy the introduction of an instrument into practice, against the use of which there must exist a strong prejudice in all rightly constituted minds. Regretting that this note should take up so much of your valuable space,

I remain, Sir, your obedient servant,

Spectator.

THE SPECULUM COMMITTEE.

[To the Editor of the Medical Times.]

Sir,—Dr. H. Bennet appears to be very anxious that a Committee of speculum doctors should be formed, for the purpose of ocularly examining the womb of 100 or more women, at some public Institution. I do not believe that the governors of any charity in London would dare to sanction such an indecent proceeding. No respectable member of the medical profession would belong to such an obscene association; but there are now among us more than half a dozen of speculumizers who would see no objection, on the score of propriety or morality, to join it, and who would not be slow to officiate, nor backward to attest, that the majority of Englishwomen are labouring under the most disgusting of all human maladies—ulceration of the womb. In no dispensary nor hospital in England will such a Committee ever be allowed to hold its sittings. It has happily, however, just occurred to me, that the Opera-house would be the most appropriate sphere for the proposed operations of the Committee. A box might be engaged at the top of the house for a moderate price, which would hold the whole fraternity. Between the acts there would be abundance of time, and no lack of ladies, who would be delighted with the exhibition. At the close of the season the Committee would be expected to furnish a report, for the satisfaction of the public. It would be invidious to mention names for the offices of president and secretary of this Committee; but the appointment of Dr. Locock, and his friend Dr. H. Bennet, would, I have no doubt, be satisfactory to all concerned. I enclose my card, and am, Sir, Your obedient Servant,

Pudor.

ADVANTAGES OF LIFE ASSURANCE TO MEDICAL MEN.

[To the Editor of the Medical Times.]

Sir,—The destitution in which so many of our brethren die and leave their families affords scope for the utmost commiseration and regret. Some, it is true, suffer from the untoward urgency of circumstances; but others go on from day to day without employing the means which lie at their disposal to avert the else certain impoverishment that awaits wife and child, or perchance other dear dependants. The man must be wanting in natural affection, or common sense, who neglects to provide for those whose welfare God has lodged in his hands. Who has a right to contract marriage without discharging, so far as in him lies, the sacred obligations which it entails? There have been those who lived in unscrupulous profusion, whose families, nevertheless, it has devolved upon the public to support. It is a common feeling with medical men, that they must "keep up an appearance," and to this they too often sacrifice, or hopelessly pro-

crastinate, the yet more insuperable obligation of making a provision for their dependants. How much better than this unwarrantable ostentation would be the division of the daily receipts,—half for immediate sustenance, and half for prospective family requirements. If a man cannot or will not save, he should either abandon his profession, or, at least, not implicate others in his improvidence. Considering the exigencies and inevitable uncertainty of human life,—medical life in particular,—no one can deny the necessity, no one contest the efficacy of saving. That admirable invention of modern times, life assurance, enables every man to compass a provision in reversion, almost out of hand. For the yearly outlay of 20*l.*, a practitioner turned twenty-six, can secure 1000*l.*, payable (were his decease there and then to ensue) the very instant after his policy was signed. For a reasonable increase, the policy for that or any other given sum may be paid up in ten, fifteen, or twenty years, securing, as it were, in addition a reversionary annuity for his declining years, or those other purposes which family requirements do not fail to suggest. I invite every member of the profession, if his life be not already assured, or his independence otherwise secured, in place of an annual guinea to a medical fund, to hand over his guinea, if no more, to an insurance company. For this slender sum, a man at the age above noted, will certainly secure to his family some 50*l.* at the period of his decease.(a) The Irish Benevolent Fund, by its last audit, had but 250*l.* at its disposal,—a sum manifestly inadequate to meet the numerous applications,—sixty-three heads of families in all,—which were made to it. What were this among so many? There can be no possible reason why all medical men should not thus avail themselves of the benefits of assurance; and little doubt, I think, can remain upon the mind as to which procedure is the more eligible, which more conformable to prudence, and real charity to survivors. These remarks apply, *mutatis mutandis*, as much to Britain as to Ireland. I am anxious to impress it on the members of our noble profession, not to rely on the slender contingency of a benevolent fund, but upon their own right arms. I would urge all to appreciate the inestimable blessings of life assurance, to practise it themselves, and impress it on those within their sphere of influence. And I would respectfully solicit the press to yield these my well-meant, and I trust useful, exhortations a wide-spread diffusion.

HENRY M'CORMAC, M.D.

[We entirely agree with the benevolent sentiments expressed by Dr. M'Cormac; and while we participate in his high estimate of the value of the common means of Life Assurance, we are happy to point out to him an institution, now just established, which seems to us completely to fulfil all the purposes contemplated by Dr. M'Cormac. We refer to "*The British Medical Fund; a Provident and Relief Society for Medical Men, their Widows, and Orphans,*" this day advertised on our cover. This Society affords, not merely the means for every practitioner *securing* to his family provision after his death, but provision for himself during sickness or accident. It, moreover, has this distinctive and admirable feature, in being associated with a *benevolent branch*, the exclusive object of which is, to afford a medium through which the richer members of the profession may have the opportunity of aiding all who *deserve* aid, viz., those who have shown a provident care for those nearest and dearest to them. This is effected by the fundamental principle of the Benevolent Branch, which *limits* all relief to the families and near relatives of *members*,—that is, to those who, by subscribing for the good of themselves or families, have proved that they did not overlook or forget their duties to themselves and those dependent on them.—ED. *Medical Times.*]

REMUNERATION OF MEDICAL OFFICERS.—HYDROCYANIC ACID IN WOUNDS, &c.

[To the Editor of the Medical Times.]

SIR,—I am surprised to see the statement of Mr. Rawlinson in your excellent periodical of Saturday last, respecting the non-payment of his fee by a Board of Guardians, for the reduction of a fracture of the leg, and cannot but think the Board considers the patient able to pay, as else they would not refuse. I have attended a part of a union and a workhouse for several years, and have never waited for an order to attend any accident belonging to the union, but have gone immediately to it, made the usual weekly return, and have never had any demur about payment; in fact, I have always considered I was subjecting myself to an action for refusing to attend instanter to any accident belonging to the union. Perhaps I may be allowed once more to mention the great advantage to be derived from the external application of hydrocyanic acid, in the quantity of six drops to an ounce of water in the adult, in all cases of wounds, contusions, fractures, &c., especially in children. I have been in the constant habit of employing it in all these cases, particularly those attended with much pain, for the last ten years, with the best possible effect, and feel convinced that in the last most lamentable case, (that of the late Sir R. Peel,) the excessive pain he endured so long would have been immediately relieved under its use, sleep safely procured, and the surgeons allowed to make a careful examination of the injuries inflicted.

I remain, Sir, your obedient and obliged servant,

Tamworth, July 8, 1850. R. CAVE BROWNE.

(a) This point I took care to ascertain from Mr. Henderson, the local agent of an assurance company (the Scottish Amicable).

REPORTS OF SOCIETIES.

ROYAL SOCIETY.

The EARL OF ROSS, President, in the Chair.

ON THE STRUCTURE OF THE TEETH OF RODENTIA.

BY JOHN TOMES, Esq., F.R.S.,
Surgeon-Dentist to the Middlesex Hospital.
[Communicated by WM. BOWMAN, Esq., F.R.S.]

THE Author of the paper bearing the above title relates the results obtained from an extensive series of investigations on upwards of sixty of the more typical members of the order Rodentia. He finds, that not only are the teeth of animals of this order distinguished by strongly marked structural peculiarities (hitherto not recognised) from other mammalian teeth; but, also, that the teeth of the several larger groups are distinguished from each other by modifications in what may be called the rodential type of dental tissues. Mr. Tomes pointed out in a Paper, published in Part II. for 1849 of the "Philosophical Transactions," that in the teeth of marsupial animals the dentinal tubes are continued into the enamel.

In the present communication he shows, that the structural peculiarities which characterise and are confined to the teeth of rodents are also mainly resident in the enamel. The earlier pages of the paper are devoted to a description of those structural conditions which are common to the teeth of the whole order.

Among these, the author finds that the extremities of the dentinal tubes, which, in the lower part of the tooth communicate with the pulp-cavity, become, in the extruded portion, sealed up by the development of a layer of non-tubular tissue, which is formed at and near the apex of the pulp-cavity. This closure of the dentinal tubes is not, however, confined to the teeth of rodentia, but occurs in all teeth in those parts exposed to wear. A similar condition is found to obtain in the osseous tissue which forms the antlers of the deer tribe. If a portion of an antler, previous to its losing its periosteum, be examined, ordinary Haversian systems are found; but, if an antler which has been shed be examined, each of the larger Haversian systems will be found to be lined by a layer of transparent tissue, destitute both of lacunæ and canaliculi.

The author considers these conditions to indicate the existence of a general law, viz.:—"That dense tubular tissues, when about to be exposed to wear, or about to be cast off, are first deprived of their connexion with the nutrient fluids by the development of a layer of non-tubular tissue between them and the vascular surface with which they were originally connected, and from which they derived their nutriment."

In order to facilitate description, Mr. Tomes proposes to use several terms as indicative of the number and arrangement of the component tissues of teeth. Thus a tooth, which

has one central pulp-cavity, from which the tubes radiate to all parts of the dentine, he terms a dentinal system; and if this be coated with enamel, partially or wholly, a denticle. A tooth, composed of several dentinal systems, each of which are more or less invested with enamel, and the whole united into a mass by cementum, he describes as a tooth composed of denticles; but, if the dentinal systems are united without the intervention of enamel or cement, as a tooth composed of dentinal systems. If the systems are united to each other throughout their length by a narrow band of dentine, the tubes of which belong as much to one as to the other adjoining system, the tooth is said to be made up of confluent dentinal systems; but, if each system is partially coated with enamel, of confluent denticles.

The tooth of the Labyrinthodon is mentioned as being composed of confluent dentinal systems, with an external investment of enamel common to the whole. He objects to this tooth being described as divided into compartments by inflections of the cementum, because the division into dentinal systems takes place internal to the enamel, external to which the cementum would be placed, if there were any in this part of the tooth.

A minute description of the dental tissues of upwards of fifty species of rodents forms part of the paper. They are taken in the order proposed by Mr. Waterhouse in his arrangement of rodentia, published in "Johnston's Physical Atlas." The author has followed this arrangement, because he finds that it accords with the modifications of the dental tissues. The incisors are described as possessing the most strongly marked and constant characters.

The enamel of the incisors of rodents has been described by Professor Owen as composed of two layers; an inner placed next the dentine, and an outer which extends towards the surface of the tooth. Mr. Tomes objects to this description, on the ground that the fibres of the inner and outer division are continuous; a change of direction and arrangement does not occur in the hare tribe.

The anterior surface of the incisors of many rodents has a deep brown colour, which has been attributed to the presence of a layer of coloured cementum. The author states, that the enamel fibres can be traced through this colured part to the surface of the tooth; and hence regards the colour as a stain resident in the terminal ends of the fibres, and denies the presence of cementum in this part of the tooth.

The great distinguishing structural feature in this order of quadrupeds consists in a lamelliform arrangement of the fibres of the enamel in the inner division of that tissue.

In the Sciuridæ the enamel is composed of parallel layers of fibres, and each layer of a single series, which in the contiguous layers pass in contrary directions, so as to give a square pattern to the inner or lamelliform portion, when seen in a transverse section of the tooth. In the outer part of the enamel the decussation ceases, the fibres suddenly change their course, become parallel, and proceed upwards in straight lines to the surface, but without any indication of lamination. In a longitudinal section, the laminæ are seen to be at right angles to the surface of the dentine. This peculiarity of position the author finds to be constant in the squirrel tribe and marmots, but he has failed to find the same angle preserved in the members of any other group.

In the rat family, Muridæ, a similar lamelliform arrangement of the fibres is present in the inner part of the enamel, but the laminæ lie at an acute angle with the surface of the dentine, and, as seen in a longitudinal section of an incisor, have well-marked serrated edges. The fibres are generally oval in their transverse section, but, when exposed in their length, have slight serrations from what may be regarded as their upper and lower surfaces. These little processes occupy the intervals left by the oval figure of the fibres of the layers situated immediately above and below.

The incisors of the gerboa (*Dipus Egyptius*) and dormouse (*Myoxus avellanarius*) show the serration of the laminæ but indistinctly, and are otherwise peculiar in having the layers of the enamel fibres in the lower incisors extended in the length, while those of the upper teeth are placed across the tooth, just as in the squirrels and in the more typical rats. Hence, in these creatures, a longitudinal section of a lower corresponds in appearance with a transverse section of an upper incisor.

In the rootless molar teeth of the members of this extensive family of rodents the enamel corresponds, in its lamelliform arrangement, with that of the incisors. But, in the rooted molars, the laminated character is seen near the terminal edge of the enamel only. In the molar teeth of the gerboa, the dentinal tubes are continued into the enamel, in the same manner as in the teeth of marsupial animals.

In the members of the Hystricine family, Mr. Tomes finds that the enamel presents an appearance very different from that observed in the teeth of the preceding groups. The fibres take a serpentine course, and describe several uniform curves in the inner part of the tissue, the number and size of the curves varying in the different species. Notwithstanding this peculiarity, the fibres are disposed in laminæ, which run transversely across the tooth.

In a longitudinal section of an incisor, the laminæ appear thick and confluent; while, in a transverse section parallel to the course of the fibres, it is seen that the curves of the fibres of contiguous layers take an opposite direction, but that those of alternate layers follow the same course. It is, moreover, seen, that the curves of the fibres, when regarded in the whole breadth of the enamel, are arranged in series, which commence at the surface of the dentine, and, instead of following the surface of that tissue in contour, lines proceed obliquely outwards, and crop out near the surface, where the fibres become straight and parallel, and lose their lamelliform arrangement.

This curved disposition of the fibres gives to the enamel, as seen in the longitudinal section, an extremely complex appearance.

In the molar teeth of Hystricine rodents the author finds a similar arrangement of the enamel fibres; but with the characters of group less strongly marked than in the incisors, and subject to modifications in the different species.

The *Brathyergus maritimus* is found to have teeth structurally similar to the hystricine family, with which it has been placed; but is now separated, and located in the last section of the muridiæ.

The *Helamys capensis*, though placed in the rat family in the arrangement which the author has followed, appears, in its dental structure, to be closely related to the Hystricine animals, and, in the minor degree, to the hare tribe.

In the *Leporidæ*, a family containing forty-six species only, and therefore numerically unimportant, as compared with the preceding groups, which, collectively, contain 558 species, Mr. Tomes finds that the incisors differ in structure from those of the preceding families, in uniformly possessing vascular dentine, and also in having the fibres of the enamel continued in an uninterrupted course from the surface of the dentine to the surface of the tooth, and without the slightest indication of an outer and inner division similar to that which forms so constant a character in the incisor teeth of the preceding groups. The lamelliform arrangement of the enamel fibres is broken and indistinct, and their decussation, as seen in a transverse section, is irregular.

In the molar teeth of the hares the enamel fibres, where the tissue is tolerably thick, proceed through the first part of their course in straight and parallel lines, but afterwards describe one or two large curves, and with an irregular lamelliform arrangement.

The author remarks, that the enamel in the teeth of the leporidæ bears a close structural resemblance to that of the teeth of the Wombat, described and figured in his previous communication to the Society, and that in the hare tribe the structure of the dental tissues generally are more closely related to those of the hystricidæ than to any other rodential family.

The paper was illustrated by numerous figures. It is stated at the conclusion, that the author purposes, in a future communication, entering into the development and special adaptation of the peculiarities of the dental tissues, which it has been the business of this paper to lay before the Society.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

B. Phillips, Esq., Treasurer, in the Chair.

(Continued from page 460, Vol. XXI.)

CASE OF FATAL POISONING BY SIR WILLIAM BURNETT'S FLUID.

Reported by H. LETHEBY, M.B., Lecturer on Chemistry in the Medical School of the London Hospital.

(Communicated by T. B. CURLING, Esq.)

The author commenced by expressing his belief that no fatal case of poisoning by chloride of zinc is on record—a

remarkable fact, as the very commonly employed deodorising fluid referred to is a strong solution of this poisonous salt. It will be found that the writings of the leading toxicologists, English and French, contain no mention of this salt as a possible source of danger to the community. The case related is that of a little girl, aged fifteen months, living at Reddingfield, in Suffolk. Mr. Miller, of Eye, in the same county, was called to her on the 16th of August, 1849. She was in a semi-comatose state, the vital powers being much prostrated, the countenance pale and anxious, the breathing thoracic and rapid, the pulse quick and fluttering, and the general surface of the body cold, and bedewed with perspiration. The swelling of the lips, and the thick transparent mucus adhering to them, led to further examination, and the lining membrane of the mouth was found to have the appearance of having undergone the action of a corrosive substance. The child had been well in the morning, and only an hour and a half before Mr. Miller saw her, had been seized with most violent sickness. A bottle of Sir William Burnett's fluid had been supplied to the mother some days previously, in consequence of some cases of fever in the house she inhabited. On rousing the child, it craved for cold water, which evidently refreshed its mouth, but little, if any, could be swallowed, and it was partly returned by the nostrils. The throat was evidently swollen and painful. No relief could be given; vomiting of a frothy liquid took place at intervals, but the coma became deeper, the respiration slower, the pulse more feeble, and ten hours after the symptoms had commenced, the child died. The body was examined twenty-two hours after death. Marks of the corrosive poison were found on the lips, lining membrane of the mouth, fauces, and œsophagus; it was white and opaque. The outer surface of the stomach had a mottled appearance, from ramifications of dark purple vessels; the intestines looked paler than natural. The stomach felt hard and leathery, and contained an ounce and a half of a fluid resembling curds and whey. Its inner surface was corrugated, opaque, and tinged of a dark leaden hue; this appearance ceased abruptly at the pylorus. The lungs were slightly congested; the auricles of the heart full of dark, semi-fluid coagula; the ventricles empty. The kidneys were much congested. The interior of the stomach was slightly acid to litmus paper, and on digesting the organ in an ounce of distilled water, the liquid obtained gave white precipitates with prussiate of potash, mono-carbonate of soda, sulphuretted hydrogen, and acid nitrate of silver, no precipitate being obtained on the addition of a soluble salt of baryta. The presence of chloride of zinc was thus demonstrated. The fluid matter taken from the stomach, and that ejected by vomiting, on being filtered and tested, gave the same reactions. The tissue of the stomach was then broken up with nitro-muriatic acid, the solution evaporated to dryness, re-dissolved in distilled water, filtered, and precipitated with sulphuretted hydrogen, by which means 3·8 grains of sulphuret of zinc were obtained, a quantity equal to 3·2 grains of the oxide, and 5·4 of the chloride of the metal. The fluid in the possession of the mother had a density of 1600, was slightly acid, and contained fifty-two per cent. of the solid chloride. Experiments made with this liquid, in order to determine its leading chemical and physiological characters, showed—1st. That the chloride of zinc is distinguished from the other salts of the metal by its quick and firm coagulating action on liquid albumen and on the delicate tissues of the body. 2ndly. That a solution of chloride of zinc exerts a twofold action on the living animal economy. Its first effect is that of an irritant and caustic; the liquid coagulates the tissues, gives pain in the part to which it is applied, and causes almost instantaneous vomiting. It appears, moreover, from the investigations of Orfila, that the salts of zinc act upon the stomach, not only when they are introduced into this organ, but also when they are injected into the blood-vessels of the body, or applied to a wounded surface. The second effects are of a constitutional nature, and it would appear that the poison exerts a distinct and specific action on the motor and organic systems of nerves, for soon after the poison gains access to the circulation, the breathing and pulse become accelerated, paralysis of the voluntary muscles commences, the surface of the body grows cold, the pupil is dilated; the circulation and respiration become more and more affected, and, lastly, the brain suffers, coma supervenes, and death takes place without a struggle. The author stated, moreover, that his experiments prove the poison to be absorbed from the alimentary canal, and carried into the general circulation; he has detected the metal in the blood removed from the heart, in the tissues of the body, and in the urine excreted during life. The appearances presented by the blood indicate that the poison exerts some peculiar action on this fluid, which is found black and uncoagulated, and the cavities of the heart are distended as if the organ had lost the power of contracting its contents.

Mr. Ure observed, that the chloride of zinc had been found very useful in surgery. He had employed it in a great many cases, and in an article published by him years ago, he had pointed out its remarkable affinity for albumen. When it has been employed in surgery, no symptoms indicative of its absorption into the system have occurred. He (Mr. Ure) quite agreed with Dr. Letheby in his opinion as to the action of the sulphate of zinc on the system.

Dr. Letheby said, that his own experiments were quite in accordance with the observations made by Mr. Ure concerning the great insolubility of the coagulum formed by chloride of zinc with albumen. In point of fact, he had remarked that when an albuminous tissue, as for example the stomach of an animal, had been acted on by this coagulating agent, it might be steeped in water for a considerable period of time without either dissolving or decomposing, or even yielding up the great bulk of the salt with which it was combined, showing that the affinity of this compound for albumen is very great; and he thought it highly probable that chloride of zinc might in most cases be employed as a caustic without there being much chance of its entering the circulation, or of its producing any especial constitutional effect. But for all this it was very clear from the results of his late investigations that the poison always found its way into the circulation when it was administered internally; for, in the cases recorded, he had been enabled to recognise the metal, not only in the tissues of the body, and in the blood removed from the heart, but also in the urine voided during the lifetime of the animal.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, July 5, 1850.

Adams, William, Morganstow, Cornwall.
Bown, John Young, Hamilton, Canada West.
Forster, Arthur, Norwich.
Fowler, Robert, Cardigan.
M'Cormick, Richard, Tuam, Galway.
Madge, Henry, Clovelly, Devon.
Massey, Hugh Holland, Camberwell, Surrey.
Neale, Richard, Liverpool-road, Islington.
New, George William, Lascelles-place, Bloomsbury.
Pound, George, Axminster, Devon.
Reynolds, John Russell, Leeds.
Trouncer, John Henry, Shrewsbury, Salop.

Tuesday, July 9th, 1850.

Barwis, Thomas Leonard Barber, Penryn, Cornwall.
Blyth, Edward James, Richmond, Surrey.
Clarke, Thomas, Bradford, Yorkshire.
Cornelius, Henry Thomas, High-street, Whitechapel.
Fox, Henry Erasmus, Huntingdon.
Hammond, Charles William, Ipswich, Suffolk.
Higgs, Isaachar, Brierly Hill, Staffordshire.
Manley, Henry, Crediton, Devon.
Pullin, Thomas Henry Stocker, Sidmouth, Devon.
Seville, John Heywood, Lees, Lancashire.
Warden, Charles, Edgbaston, Warwicksbire.

The College Elections.—Mr. James Moncrieff Arnott, F.R.S., formerly of University College, was elected President of the Royal College of Surgeons, at a meeting of the Council on the 11th inst., in the vacancy occasioned by the retirement of Professor Joseph Henry Green, F.R.S., who retains his seat in the Council and Court of Examiners; and Messrs. John Flint South, of St. Thomas's Hospital, and Cæsar Henry Hawkins, F.R.S., of St. George's Hospital, were elected Vice-Presidents of the College for the ensuing year. At the same meeting of the Council, Messrs. Pilcher, Mackmurdo and Kiernan, the recently-elected

Councillors, were sworn in, and took their seats at the Council.

The Fellowship.—From an advertisement on our cover, it will be observed, that the next examination for this distinction will take place on Monday and Wednesday, the 5th and 7th of August next.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on

Thursday, July 4, 1850.

Clarke, Thomas, Bradford, Yorkshire.
Craven, John, Dockroyd, Keighley, Yorkshire.
M'Pherson, David Grant, Bristol.

Obituary.—On the 28th ult., at Wraysbury, near Staines, aged 69, John Shelton, Esq., M.R.C.S.L. and E. On the 4th inst., at Charing, Kent, Thomas Prescott Wilks, Esq., surgeon, aged 79. On the 1st instant, at Exeter, aged 62, Peter Wyatt, Esq., of Islington, surgeon. On the 30th ult., at Madrid, Dr. Castillo, chief physician to H.M. the Queen of Spain. On the 17th ult., at New York, Delancy Powell, M.D., aged 27.

Military Appointments.—7th Regt. Dragoon Guards.—Surgeon Gideon Dolmage, from the 8th Light Dragoons, to be Surgeon, vice Foaker, who exchanges. 8th Light Dragoons.—Surgeon G. Northon Foaker, from the 7th Dragoon Guards, to be Surgeon, vice Dolmage, who exchanges.

The Saline Treatment of Cholera.—At a public meeting of inhabitants of Sligo, the following resolutions were adopted:—Resolved,—"That we deem a public compliment eminently due to Dr. Tucker, for his invaluable services rendered to the sick during the epidemic of cholera. His unwearied diligence in the discharge of his arduous and perilous duties—his skilful and scientific treatment of the disease which, under Divine providence, was marked with such signal success, demand our warmest approbation and thanks." Resolved,—"That, to mark in a substantial manner our high estimation of Dr. Tucker's worth, ability, and zeal, exhibited during the late epidemic, a Committee be formed to receive subscriptions, and to devise the most suitable form of testimonial to present him with." The testimonial—a gold watch—bears the inscription, "Presented to James Tucker, M.D., by the people of Sligo, as a testimonial of their estimation of his skill and ability, exhibited during the visitation of cholera, A.D. 1849." Dr. Tucker, in his medical report to the subscribers to St. John's Dispensary, says:—"I have the gratification to report to you the satisfactory results that, under Divine providence, attended the treatment of cholera recommended by Dr. Stevens (the saline)."

The General Board of Health.—A Bill was introduced into the House of Commons, on the 4th inst., to confirm certain provisional orders of the General Board of Health, of which the following is an abstract:—It commences by fixing the dates when the first election of the Local Boards of Health for Ashby-de-la-Zouche and Sandgate shall take place, and then proceeds to regulate the number of vestrymen for the parish of St. Margaret, Leicester, and to vest the surveyorship of the highways in the Local Board of Health, giving the latter body the power of paying for the lighting the parish by orders on the treasurer, to be paid from the improvement rate. Local Boards of Health, established under the Public Health Act, in places where there is not any gas company, may by this Bill supply gas and construct works and apparatus for its supply, the expenses incurred to be defrayed out of the rates to be levied according to the Public Health Act. This Bill is to be termed the Public Health Supplemental Act.

The New Population Bill.—The Bill before the Houses of Parliament, for taking the census in 1851, provides, that every registrar's district in England shall be formed into enumeration districts, each registrar receiving a certain number of copies of the instructions issued, and having the power to subdivide his district, such subdivision being subject to the approval of the superintendent-registrars, and of the Registrar-General. Each registrar is also to furnish the names, &c., of a sufficient number of persons duly qualified to act as enumerators, who may be appointed by the superintendent, if the Registrar-General approve. On the 9th of June, 1851, each enumerator is to visit each house in his district, and take an account in writing of the name, sex, age, and occupation of every living person, who abode in each house the previous day. He is also to ascertain which of them are foreigners, and to take account of occupied and unoccupied houses, and of those in course of building. He is also to distinguish the several parishes and places maintaining their own poor, or such parts thereof as may be in his own district, and also those parishes or parts of parishes in cities or boroughs returning members of Parliament, or an incorporated city or borough, or ecclesiastical districts. The reports, verified by the registrar, are to be delivered to the superintendent-registrar, who is also to examine, verify, and correct them, and return them, on or before the 1st of August, to the Registrar-General for the Secretary of State, under whose superintendence the scheme is to be carried out. Abstracts of these returns are to be made and printed for the use of Parliament. In Scotland, the duties of the registrars are to fall on the sheriffs' deputies, and the provosts or other chief magistrates; the schoolmasters, or other fit and proper persons, being the enumerators. Schedules are to be provided for their use, and for the English enumerators, to be filled up by the occupiers of houses; the penalty for not doing so, or for a wilfully false return, being not more than 5*l*. nor less than 2*l*. The masters or keepers of gaols, workhouses, hospitals, or lunatic asylums, and of every public or charitable institution, are to act as enumerators for the institutions under their management. The overseers of the poor, constables, and other peace officers, on the requisition of the Secretary of State, are bound to act as enumerators, under a penalty of not more than 10*l*. nor less than 5*l*. Measures are also to be taken for obtaining the census of travellers, houseless persons, and vagabonds. The registrars or enumerators making wilfully false returns, are to be liable to a penalty of not more than 5*l*. nor less than 2*l*. They are to be authorised to ask such questions as they may deem advisable; and persons refusing to answer, or answering falsely, forfeit 5*l*. or not less than 1*l*. Penalties in England recoverable before two justices of the peace; in Scotland, before the sheriff or two justices of the peace, by summary process. The expenses incurred under this Act to be paid from a sum set apart by Parliament for that purpose.

Extraordinary Undertaking. — Dr. Shirley Palmer, whose Pentaglot Dictionary has long been before the professional public, is preparing for the press a Polyglot Dictionary of Medicine and the Natural Sciences, the leading terms to be in English, followed by the synonymes in the Hebrew, Greek, Latin, French, Italian, Spanish, Portuguese, German, Dutch, Danish, Swedish, and Russian languages, with concise explanations in English, and occasional illustrations in various other languages. Dr. Palmer contemplates adding to these languages the Anglo-Saxon and the Sclavonic. Such a stupendous work richly deserves patronage, and, we trust, will find it. Dr. Palmer is well known as a talented physician and an accomplished scholar.

The University of London cost the nation nearly 4000*l*. last year. The Scotch Universities about 8000*l*. There was some talk in the House of Commons lately about throwing open the libraries of the Scottish Universities to the public, on the ground that the nation contributed to their support, but it ended in nothing. Such a proceeding, if carried out, would interfere greatly with the privileges and welfare of the students.

Several Cases of Cholera have occurred at Malta, some in the fleet, and also in the 44th Regiment in garrison. Exclusive of both arms of the service, there have been 39 cases and 34 deaths; total number of cases, 82; deaths, 60.

Sanitary Effects of Soft Water.—Dr. Leech, of Glasgow, states that the comparative value of the new soft water supply over the old hard water was a matter of discussion at the Glasgow Southern Medical Society. It was the unanimous opinion of the medical profession that great benefits of a sanitary kind had followed the substitution of the soft water on the principle of the constant supply. Since this change urinary diseases have become less frequent, especially those attended by a deposition of gravel. So far as experience has gone, his opinion is that dyspeptic complaints are diminished in number. With the same reservation as to time, it is the opinion of the profession, that fever has numerically diminished, and that the cases that occur are more amenable to treatment from the use of the soft water, than they were formerly.—*Report of the General Board of Health on the Water Supply.*

Ophthalmia is very prevalent in the garrisons of Lemberg and Comorn, and also in the principal towns in Italy.

METROPOLIS.

TABLE showing the BIRTHS and DEATHS for the FIRST HALF-YEAR of 1850, the several DISEASES, BIRTHS and DEATHS of MALES and FEMALES, AGE at DEATH, the DISTRICTS in which the DEATHS occurred, the TEMPERATURE and METEOROLOGY, and the INCREASE of POPULATION.

By Mr. B. SMITH.

DATE.	ZYMOTIC* DISEASES.	SPORADIC DISEASES.															BIRTHS.		DEATHS.		TOTAL BIRTHS.	TOTAL DEATHS.	BIRTHS OVER DEATHS.	AGES AT DEATH.			DISTRICTS.					Mean Height of BAROMETER.	THERMOMETER.		Difference between the Temperature of the week and the same week on an average of 7 years.	General Direction of the Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.
WEEKS ENDING		1.*	2.*	3.*	4.*	5.*	6.*	7.*	8.*	9.*	10.*	11.*	12.*	13.*	14.*	15.*	16.*	Males.	Females.	Males.	Females.				0 to 15	15 to 60.	60 and upwards.	West.	North.	Central.	East.	South.		Dry.	Dew Point.				
1850.																															Inchs.	°	°	°		Miles.	
JAN. 5	179	54	186	146	42	232	63	15	6	10	1	4	31	17	69	22	49	816	726	578	555	1542	1133	409	447	406	274	143	220	198	235	337	29·867	35·4	30·8	— 2·2	S.W.	639	0·00
,, 12	185	41	181	114	52	255	53	13	9	9	4	3	23	15	69	8	22	688	681	503	562	1369	1065	304	372	385	303	157	181	185	249	293	29·821	30·3	25·1	— 5·3	N.	375	0·00
,, 19	193	46	207	129	51	263	58	9	13	7	4	5	36	21	73	7	27	683	700	546	610	1383	1156	227	445	393	313	183	228	217	208	320	29·574	31·1	27·7	— 5·5	N.E. & N.	800	0·54
,, 26	158	45	175	120	32	252	64	9	8	7	3	6	31	22	51	12	23	766	728	508	526	1494	1034	460	423	321	276	176	166	183	208	301	30·050	35·5	31·5	— 1·9	E. & S.W.	905	0·32
FEB. 2	168	46	179	138	45	247	64	20	9	9	2	1	20	23	68	18	25	770	718	528	566	1488	1094	394	423	366	295	149	198	191	255	301	29·942	41·8	37·3	+ 6·1	...	1355	0·56
,, 9	152	44	170	125	31	175	66	11	6	8	...	3	22	27	56	8	45	785	712	477	480	1497	957	540	420	308	222	137	175	175	188	282	29·457	44·0	38·3	+ 10·7	S.W.	1763	0·32
,, 16	141	41	166	119	37	199	62	12	10	8	1	3	27	27	42	15	22	724	752	483	455	1476	938	538	419	297	222	133	183	153	205	264	29·745	42·8	36·9	+ 6·9	S.W.	1445	0·53
,, 23	169	57	138	111	50	167	49	14	8	6	1	3	22	18	45	22	28	781	755	467	444	1536	911	625	394	308	209	143	193	151	182	242	30·070	47·2	41·9	+ 7·7	S.W.	1015	0·19
MAR. 2	153	48	142	122	28	176	60	10	11	6	...	5	28	26	45	11	21	813	761	460	436	1574	896	678	418	273	202	139	159	167	191	240	30·168	42·8	38·3	+ 3·3	Variable	395	0·00
,, 9	133	50	149	141	33	171	50	15	12	10	4	2	13	18	42	9	21	733	743	433	442	1476	875	601	371	282	222	125	160	160	186	246	30·179	42·4	38·5	+ 2·7	Variable	380	0·04
,, 16	149	43	198	126	42	182	52	13	9	6	2	3	16	23	43	19	38	728	656	500	467	1384	967	417	432	327	205	139	179	187	158	264	30·292	40·9	33·7	— 0·5	N.E.	435	0·00
,, 23	161	34	170	120	47	231	53	15	12	6	1	5	29	18	50	31	36	769	693	520	506	1462	1026	436	437	342	239	139	217	179	214	277	29·971	37·8	28 9	— 5·7	N.	760	0·12
,, 30	182	57	165	127	54	252	69	9	9	9	1	...	22	22	37	52	98	711	720	600	567	1431	1167	264	483	401	277	150	216	225	256	320	29·746	35·9	25·4	— 8·7	N. & E.S.E.	355	0·17
APRIL 6	158	54	186	162	37	253	63	11	9	11	2	6	31	26	62	17	35	697	646	560	564	1343	1124	219	466	355	301	182	210	187	224	321	29·363	49·6	43·8	+ 4·5	...	...	0·30
,, 13	157	38	163	118	37	174	61	6	7	6	2	2	21	23	48	4	24	745	728	459	434	1473	893	580	388	293	210	143	165	163	192	230	29·425	49·5	45·0	+ 5·1	...	540	0·58
,, 20	171	55	161	113	34	141	44	12	9	7	1	4	20	14	42	15	17	755	716	434	432	1471	866	605	377	296	193	123	206	143	167	227	29·504	48·9	43·6	+ 2·9	...	1100	1·10
,, 27	150	39	147	100	31	112	55	13	14	12	2	4	22	16	28	23	28	729	770	391	412	1499	803	696	333	293	169	141	186	120	157	198	29·863	46·8	37·6	— 2·4	N.	655	0·05
MAY 4	159	30	146	108	43	138	45	9	7	6	1	6	13	14	30	10	51	718	738	419	410	1456	829	627	349	309	159	132	174	150	154	219	30·040	45·5	34·1	— 6·4	N. & N.E.	625	0·11
,, 11	146	43	153	123	37	137	50	14	8	9	2	2	20	24	37	...	18	643	677	430	427	1320	857	463	358	289	187	131	155	134	190	247	29 575	46·7	41·0	— 5·4	N.E. & S.W.	685	1·19
,, 18	147	29	171	109	35	145	61	8	5	10	4	3	23	14	31	28	37	780	710	464	416	1490	880	610	380	288	197	140	189	144	166	241	29·817	49·2	39·7	— 3·2	Variable	560	0·22
,, 25	156	48	168	102	36	138	57	8	9	6	3	1	18	18	39	10	38	676	666	459	407	1342	866	476	359	308	189	142	166	132	166	260	29·486	55·5	48·7	+ 1·1	N.E. & S.W.	780	0·47
JUNE 1	130	42	149	115	34	105	47	11	3	7	3	4	19	16	34	6	11	677	697	343	393	1374	736	638	306	265	164	112	128	117	167	212	29·895	58·2	50·4	+ 0·7	...	690	0·36
,, 8	172	26	184	116	36	91	59	4	18	6	2	5	23	22	32	10	28	720	638	420	424	1358	844	514	367	312	160	138	179	132	163	232	29·878	59·3	49·1	+ 0·2	E. & S.W.	750	0·08
,, 15	167	36	163	94	39	92	55	11	15	5	1	3	29	9	35	13	32	688	572	405	395	1260	800	460	346	300	154	125	175	115	166	218	29·702	58·0	49·6	— 2.2	S.W.	915	0·19
,, 22	161	52	149	91	27	106	54	11	8	7	1	...	24	20	34	7	20	749	690	394	381	1430	775	655	329	267	179	135	164	128	140	210	30·052	62·1	49·3	+ 1·4	Variable	340	0 05
,, 29	158	34	172	128	46	91	59	12	10	10	3	3	20	23	32	73	115	748	699	536	429	1447	965	482	369	374	212	165	200	164	201	235	29·888	61·2	55·4	+ 4·4	N.N.E.*	510	0·62
	4158	1132	4168	3117	1016	4528	1473	295	244	205	51	86	603	488	1174	450	909	19083	19292	12317	12140	38375	24457	13918	10211	8361	5733	3719	4772	4200	5028	6738							
Total Same Half-year of 1849	7323	1196	4681	3257	1010	4898	1575	300	224	213	35	83	599	535	1127	339	842	19377	18392	14408	14038	37769	28446	9351	13230	9250	5648	4350	5218	4859	6026	7993	† 29·800	† 50·1	† 43·4	† + 0.9		† 735	† 23·92

* Under the head "Zymotic Diseases" are included:—Small Pox, Measles, Scarlatina, Hooping Cough, Croup, Thrush, Diarrhœa, Dysentery, Cholera, Influenza, Purpura and Scurvy, Ague, Remittent Fever, Infantile Fever, Typhus, Metria (or Puerperal Fever), Rheumatic Fever, Erysipelas, Syphilis, Noma or Canker, and Hydrophobia.

Under the head "Sporadic Diseases" 1. includes Dropsy, Cancer, and other diseases of uncertain or variable seat. 2. Tubercular Diseases. 3. Diseases of the Brain, Spinal Marrow, Nerves and Senses. 4. Diseases of the Heart and Blood-vessels. 5. Diseases of the Lungs and of the other Organs of Respiration. 6. Diseases of the Stomach, Liver, and other Organs of Digestion. 7. Diseases of the Kidneys. 8. Childbirth, Diseases of the Uterus, &c. 9. Rheumatism, Diseases of the Bones, Joints, &c. 10. Diseases of the Skin, Cellular Tissues, &c. 11. Malformations. 12 Premature Birth and Debility. 13. Atrophy. 14. Age. 15. Sudden. 16. Violence, Privation, Cold, and Intemperance.

† The means are here given for the whole of the year 1849.

From the foregoing Table, it appears that during the past six months, ending June 29, the total amount of deaths was 24,457, which, as compared with the same half of 1849, gives a decrease on this year of 3989. The particular diseases in which this decrease appears are, under the head zymotic diseases, in cholera and diarrhœa chiefly; while in "sporadic diseases," the decrease has been under the heads dropsy, cancer, &c.; tubercular diseases; diseases of the brain, &c.; diseases of the lungs, &c.; of the stomach; of the kidneys; rheumatism and diseases of the bones, &c.; and in atrophy. There has, however, been a slight increase of mortality in 1849, in diseases of the heart and blood-vessels; childbirth and diseases of the uterus; diseases of the skin, &c.; malformations; premature birth; age; sudden death; and deaths from violence, &c. The whole decrease in zymotic diseases amounts to 3165; and that of sporadic diseases to 672.

The deaths (male and female) in the same period, as compared with 1849, have been as follow:—

	Male.	Female.
1849 . .	14,408 . .	14,038
1850 . .	12,317 . .	12,140
Decrease .	2,091	1,898

The figures as to births present us with striking variations:—

	Male.	Female.
1849 . .	19,377 . .	18,392
1850 . .	19,083 . .	19,292

so that while in 1849 we have a preponderance of 985 of males over females, this year the increase is in those of females by 209, so that we get a decrease of males born the last half year, as compared with that of 1849, of 294, and an increase of females to the amount of 900.

The deaths at various ages are lower this year, in the two periods of 0 to 15 and 15 to 60, by as much as 3019 and 889 respectively; but there is an increase shown on the mortality at the age of from 60 and upwards, amounting to 85, more than one half of which (47) occurred under the head deaths from "age."

As to locality or district, the deaths have decreased in the West district by 631; in the North, by 446; in the Central, by 659; in the East, by 998; and, in the South, by 1255.

The Registrar-General has supplied us with the following account of the mortality in public Institutions of London, and to which special attention ought to be directed:—

	Population.		Deaths in the Quarter ending 31 Mar., 1850.	Annual Rate of Mortality per cent.
	31 Dec., 1849	31 Mar., 1850		
London	2226362		13219	2·38
London, exclusive of 108 Institutions...	2185579		10856	1 99
108 Public Institutions, mean of the two periods	40783		2363	23
47 Workhouses	...	23972	1370	23
3 Military and Naval Asylums ...	3594	3563	119	13
11 General Hospitals	2775	2919	583	82
4 Hospitals for Special Diseases ...	158	180	44	104
4 Lying-in Hospitals	53	48	17	135
5 Military and Naval Hospitals ...	664	675	65	39
20 Lunatic Asylums	3849	...	129	13
4 Hosps. and Asylums for Foreigners	210	221	12	22
14 Prisons	5318	5551	24	2

This, be it remarked, is only a general statement; but if, for example, we compare workhouse with workhouse, instead of getting an annual rate of mortality of 23 per cent., which is the average of the whole number, we find that in two workhouses, viz., Whitechapel (North), and Newington, the deaths amount respectively to 51 and 57 in the 100; while at St. Martin's-in-the-Fields and at Hackney, the respective rate per cent. is 9 and 8, the former institution having a far larger amount of inmates than either of those showing such a high rate of mortality. Surely some explanation is demanded here; and the Registrar-General observes, "It may be well to compare the arrangements there," (Hackney and St. Martin's-in-the-Fields,) "with those in workhouses, which experience an annual rate of mortality exceeding 20 per cent."

HEALTH OF LONDON DURING THE WEEK.

In the week ending last Saturday, the deaths registered in the metropolitan districts were 794; a number which shows that the diminished rate of mortality continues, and which, taking the corresponding weeks of ten previous years, is less than in the week of any year since 1842. The average of the ten weeks is 877, or, augmented in the ratio of increased population, 947, compared with which the decrease of last week amounts to 163. The whole number of deaths recorded, as caused by the zymotic or epidemic class of diseases, is 159, whereas in the same week of last year they rose to 393, and the corrected average of ten corresponding weeks is 227. Typhus, of which 35 persons died, shows the ordinary amount of mortality; but it is much less fatal than in the same weeks of 1847—9. On the other hand, diarrhœa continues to increase, as is usual at this period of the year, but its progress is not remarkable; in the last four weeks the deaths from it, for the most part among children, have been 17, 18, 33, and (last week) 40. The average is 27. A case of English cholera is recorded as occurring at Pembroke-place, Upper Marsh, Lambeth.

MORTALITY TABLE.

Deaths in the week ending Saturday, July 6, 1850.

(Metropolis.)

Causes of Death.	June 29. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	351	290	151	794	8772
Specified Causes	350	290	149	791	8725
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	118	30	11	159	2076
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	7	20	11	38	496
Tubercular Diseases	58	104	6	168	1830
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	51	33	28	112	1072
Diseases of the Heart and Blood-vessels	2	26	10	38	263
Diseases of the Lungs, and of the other Organs of Respiration	28	22	20	70	862
Diseases of the Stomach, Liver, and other Organs of Digestion	21	22	14	57	659
Diseases of the Kidneys, &c.	...	5	4	9	72
Childbirth, Diseases of the Uterus, &c.	...	7	...	8	84
Rheumatism, Diseases of the Bones, Joints, &c.	...	7	3	10	41
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	13
Malformations	3	...	...	3	14
Premature Birth and Debility	29	3	...	32	176
Atrophy	23	...	2	25	161
Age	...	...	30	30	403
Sudden	3	2	2	7	137
Violence, Privation, Cold, and Intemperance	7	9	8	25	366
Causes not Specified	1	...	2	3	47

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	July 6, 1850.	Sum of Ten Weeks.
London...	1948369	794	8772
West	301189	136	1295
North	376568	146	1713
Central...	374199	119	1552
East	393067	166	1890
South	503346	227	2322

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	20	Heart	34	Phthisis.....	121
Bronchitis	31	Hooping-cough ...	23	Pneumonia	28
Cholera	4	Hydrocephalus ...	25	Scarlatina	20
Childbirth	2	Influenza	...	Small-pox	6
Convulsions	38	Liver	11	Stomach	3
Diarrhœa	40	Lungs	2	Teething	7
Dropsy	13	Measles	17	Typhus	35
Erysipelas	5	Paralysis	19	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	640	406	234
Females	607	388	219
Total.....	1247	794	453

METEOROLOGY OF THE WEEK.

Day.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					P.M.	A.M.			
Sunday	3.0 —	29·841	57·2	45·3	S.W.	S.W.	Miles. 170	0·60	No electricity has been shown during the week.
Monday	0·2 +	29·708	60·9	53·9	S.W.	S.W.	180	0·00	
Tuesday.....	1·3 —	29·759	60·0	48·8	S.W.	S.W.	210	0·00	
Wednesday.	0·1 +	29·673	60·7	56·4	S.W.	S.W.	215	0·00	
Thursday ...	2·1 —	29·657	59·7	56·5	S.W. & W.	Calm.	165	0·70	
Friday	2·9 —	29·969	59·0	47·1	W.	W.	75	0·02	
Saturday ...	2·2 —	29·888	59·6	48·8	S.S.E.	W.	75	0·00	
Means ...	1·6 —	29·785	59·6	50·8	S.W. & W.		SUM 1090	SUM 0·72	

*In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

With all our anxious desire to notice every volume and pamphlet we receive, we are still much in arrear. We trust soon to make up all our deficiencies in this respect.

Many thanks for the kind letters of ——— and ———, and still more for their noble request, that they may be published with their names appended. We will, however, merely observe in reply, and in the words of Crabbe :— "A great lie is like a great fish on dry land; it may fret and fling, and make a frightful bother, but it cannot hurt you; you have only to keep still and it will die of itself."

We regret that in consequence of the late period in the week when we received our excellent Edinburgh correspondent's usual communication, we are compelled to postpone its publication till our next Number. We the more regret this since the subject—"On the Theory of the Production of Pulmonary Emphysema,"—is one of great import, and is admirably treated.

Justitia may rest assured *we* shall make no false report of our sale. Suffice it to say, *we are quite satisfied.*

F.R.C.S.—We are aware that surgeons practising special branches of our art and science have sat in the Council; but surgery is not like law; we do not consider a precedent a valid reason for a line of conduct to be pursued which is otherwise incorrect and unjust.

J. M. and Mr. Robinson.—The Kousso, the new Abyssinian remedy for tænia, is said to have proved of service in the trials made at King's College Hospital. The part used is the flowers; the tree from which they are obtained is the Brayera Anthelmintica, so called from Dr. Brayer, who first made its medicinal powers known in Europe. The remedy appears in the form of a brownish powder, smelling like scammony, and slightly bitter and nauseous to the taste. The French pharmacien, who alone, it is said, has it in stock, M. Boggio, 13, Rue Neuve des Petits Champs, Paris, charges £1 15s. for a dose. Mr. Hooper, of Pall-mall, has recently stated that he also is in possession of the Kousso. We do not know what he charges for it. Dr. Budd states, that his colleague, Dr. Todd, and he have used nine doses of it, and in every instance it succeeded in killing and expelling the worms. The dose is 4½ drachms. It is to be given in the morning before breakfast, infused for ten minutes previously in about ℥ xij. of hot water, the powder being swallowed with the infusion. The symptoms it produces are not very evident; in two cases there was slight nausea for a while; in one rather smart purging, and another regarded it as a diuretic. Dr. Budd precedes its use by an aperient, so as to empty the bowels, and leave the worm more exposed; and he follows its exhibitions by another aperient, for which he assigns this singular reason, that it "may carry the medicine down to the worm, and expel the dead or enfeebled worm from the bowels." He recommends the same plan when other anthelmintics are used, especially turpentine, which, if it remain long in the alimentary canal, may be in part absorbed, and cause strangury and bloody urine, and not reach the worm in quantity sufficient to destroy it. The Kousso appears to be a very valuable and safe remedy, but its enormous price is a bar to its coming into general use.

Instinct and Reason.

[To the Editor of the Medical Times.]

Sir,—You will much oblige me, through the medium of your column to correspondents, by shortly defining the term Instinct, and the distinction between it and Reason.

Your constant reader,

X. Y. Z.

*** Instinct is an involuntary impulse to the performance of an action calculated to produce some good or obviate some evil.

Instinctive actions are immediately connected with sensations; they are perfect from the first; and are not regulated by circumstances.

Rational actions are immediately connected with thought; they are only progressively perfect; and are regulated by circumstances.

Chrono-Thermalist.—We must refer our correspondent to the Editor of the "Chrono-Thermalist, or People's Medical Inquirer," for "a succinct explanation of the system which this term represents." We confess our inability; and that, although we always read the publication. It gives us a hearty monthly laugh, and does good: just as—

"——————— Monkeys have been
Most wondrous doctors for the spleen."

We wish the clever editor would start a medical "Punch," and conduct it himself.

[To the Editor of the Medical Times.]

Sir,—Through the medium of your Journal I seek information on the following questions :—

1. How long after the sudden death of a pregnant female, providing she be a month or six weeks from her full time, is a surgeon justified in performing the Cæsarian operation with a view of extracting a living child, or one capable of being brought to life?

2. Suppose a pregnant female suffering from a protracted and debilitating illness, dies a month before she has completed the ninth month, is a surgeon justified in performing the same operation, and with the same view stated in the first question; and how long after the death ought the operation to be performed?

As I occasionally have cases of this description falling under my notice, I shall be obliged if you, or some of your wiser brethren than your humble servant, will answer. I am, yours respectfully,

Samuel Gibbons.

North Dispensary, Liverpool, July 1, 1850.

***1. Unless the operation be performed within a quarter of an hour after the death of the mother, there is little chance of saving the infant; the fœtus should therefore be removed as quickly as possible after the female has ceased to breathe. Some years ago a poor woman was killed by a stage-coach passing over her body, (the accident happened in the Borough,) she was taken into St. Thomas's Hospital, the Cæsarian operation performed, and the child, although apparently dead, was restored by the usual means.

2. Yes; but the chance of saving the child will be diminished in these cases.

In the last number of the "Edinburgh Monthly Journal" our correspondent will find a successful case of this kind. The time after death is not, however, clear, all that is said being, "that not more than twenty minutes elapsed from the time the patient was seized in the kitchen till all was over." Perhaps Mr. Harley will favour us with a more distinct statement on this point.

Errata.—Lectures on the Chemistry of the Poisons, by H. Letheby, M.B. Lecture XVI.—At page 292, column 1, line 37, for "product to hydrogen," read "product to dryness;" line 55, for "or bromides," read "and bromides;" line 13 from the bottom, for "Dr. Danberry," read "Dr. Daubeny."

A Subscriber.—We are glad to find that our New Series, or rather the first Number of it, has given so much satisfaction. It may be taken as an example of what we intend doing.

Letters and communications have been received from Dr. Thomson, of Liverpool; Mr. Milton, Jewin-street; Mr. Dixon, Broad-street-buildings; Dr. Laycock, of York; Dr. John Charles Hall, of Sheffield; Mr. Wilde, of Dublin; Dr. King, Saville-row; Dr. Simpson, of Edinburgh; Professor Lizars, Edinburgh; Mr. Brainsford, of Haverhill; Mr. Walshe, Half-Moon-street; Dr. Letheby, Rodney-terrace; Dr. Parker, London Hospital; Dr. Waller, Finsbury-square; Mr. Dobell, City-road; Dr. Woollam, of Ashton-under-Lyne; Mr. Goodlad, of Bury; Dr. Smith, Her Majesty's 16th Regiment; Mr. Vidall of Avely; Mr. West, of Poole; Dr. Roe, of Cavan; Mr. Sealy, of Swindon; Mr. Cowdry, of Torrington; Mr. Leigh, of St. Ives; Mr. Millman, of New Galloway; Mr. Dawson, of Wainfleet, All Saints; Mr. Senior, of Batley; Mr. Pilsworth, of Maryborough; Dr. Keech, of Axminster; Mr. Deane, of Chatteris; Mr. Lambert, of Sowerby; Mr. Wilson, of Whitehaven; Mr. Kipling, of Barnard Castle; Dr. Robinson, of Finton; Mr. Sheehan, of Buttevant; Mr. Martin, of Reigate; Mr. Gibbons, of Liverpool; Dr. McCormac, of Belfast, M.D.; Mr. Harday, of West Haddon; Mr. Ebsworth, of Bulwell; Mr. Brown; Mr. Clay; Mr. Jones, of Dalston; D. D. P. Thompson, Liverpool; Nepos; J. W., of Hull; and others.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

1. ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE II.

Of the Lymph in the Tuberculous Predisposition.—Of the Chyle.—Of the Blastema.—Of the Cellular Tissue, and the Peculiarities of the Structures of which Cellular Tissue forms the Basis.—Of the Vascular Tissue.—Of the Cutaneous Tissues.—Of the Hair.—Of the Nails.—Of the Mucous Membranes.—Of the Teeth.—Of the Serous Membranes, &c.—Of the Osseous Tissues and the Skeleton.—Differential Characters of the Bones in Tuberculosis and Rachitis.—Of the Fibrous Tissue.

In my last lecture I gave an account of the state of the blood in the tuberculous predisposition so far as this can at present be determined. Before entering into the detail of the peculiarities exhibited in the structures developed and nourished from tuberculous blood, and the modifications of function which result from the vitiated state of the fluids and solids in this constitution, a few considerations respecting the lymph, the chyle, and the blastema, or nutritive fluid exhaled into the parenchyma of the tissues, present themselves.

OF THE LYMPH IN THE TUBERCULOUS PREDISPOSITION.

Although tuberculous affections, and especially scrofula, have been allied from time immemorial with the lymphatic temperament, and the latter is now admitted by pathologists as a predisposing cause of these affections, no investigation, that I am aware of, has been made since the recent improvements of organic chemistry, and the introduction of micro-organic chemistry, of the state of the lymph in any grade or variety of tuberculosis. Hippocrates inferred from observation alone that there is an excess of lymph in the scrofulous habit, the excess being derived to the glands and the cause of their swelling and degeneration. The humoralists generally considered this insufficient to account for the phenomena, and imagined the existence of a virus in the lymph, which was variously regarded as an acid, a fixed salt, a volatile salt, a putrid or a bitter principle. Some held that any kind of acrimony in the lymphatic system might be a cause of scrofula. M. Baumes(a) considered that he had proved the existence of an acid principle of a phosphorous or phosphoric nature, which in the first instance thickens the lymph, and renders it liable to concrete, and ultimately tends to putridity. He founded this theory upon a presumed connexion between scrofula and rachitis, and scrofula and gout; upon the frequency of affections of the bones with destruction of their earthy material; upon the acidity in the early stages and the acrimony in the later stages, of the secreted fluids; upon the collections found after death of phosphatic salts in the glands and viscera; and upon an observation of his own, that in the earlier stages of scrofula, and even before local disease declares itself, the urine contains a diminished proportion of phosphates; whereas, in confirmed cases, according to Fourcroy's analyses, the phosphates are increased. Baumes remarks that it is uncertain whether this "acido-putrid" depravation takes its origin from the morbid blood in its passage through the glands, or from a fluid exhaled from the blood into the general cellular system, or whether it is formed primarily within the lymphatic vessels. Hufeland entertained a similar idea of an acid principle in the lymph, and the whole theory of tuberculous diseases has frequently been founded on this assumption.

Wiseman explained struma on the principle of a peculiar acidity of the serum of the blood; but the only fact which modern science has furnished to confirm the acid theory of tuberculosis, is that quoted in the last lecture from Professor Schultz, who found scrofulous blood less alkaline than natural. I am not aware that this discovery has been confirmed.

(a) Traité sur le Vice Scrofuleux. 1805. Pp. 8—13.

On the subject of the lymph in tuberculosis, we have little more than *à priori* reasoning to guide us. A morbid condition of the blood, resulting in changes of the structural elements of the body, must be attended with some change in the qualities of this fluid. There are many facts in the history of tuberculosis, as the extreme frequency of derangement in the lymphatic glands, which bear upon the conclusion that the lymph must be unhealthy in every grade of the disease. That tuberculous matter has been found in the lymph, proves nothing in favour of this fluid being more viscid than natural, or more liable to concrete; since the solid matter has presented itself after the deposition of tubercle elsewhere, and in vessels proceeding from the site of the deposit. If it be difficult to determine the specific characters of morbid blood, the shades of difference in the lymph, as respects its healthy and morbid states, must be still more obscure; and, owing to the difficulty of collecting this fluid, and the nicety of the operations required to determine its physical and chemical qualities, the inquiry seems to have been neglected. At the same time, the pathologist who wishes to take a comprehensive view of such an affection as tuberculosis, pervading as it does the whole system, must not overlook the fluid constantly flowing through the lymphatic vessels.

There are no observations to determine whether the diminished proportion of the red corpuscles of the blood in tuberculosis is attended with a diminished proportion of lymph corpuscles; the blood being less fibrinous and coagulable, and more aqueous than natural, and, as will subsequently be shown, the lymphatic vessels having a greater tenuity, and the cellular and fibrous tissues of the body being defective in structure, it may be inferred, perhaps correctly, that the lymph is thinner and more abundant, in tuberculous subjects, and that the quantity of corpuscles which it contains, their structure, and the proportion which the lymph bears to the blood,—that, in fact, some modifications of its physical and chemico-vital qualities—have much to do with the character of the disease. But, assuming that some more special modification of the liquor sanguinis exists, it remains a problem, whether the lymph partakes of that speciality, although, from the frequent occurrence of disease of the lymphatic system in tuberculous habits, the existence of a corresponding diseased condition of the lymph is highly probable.

OF THE CHYLE IN THE TUBERCULOUS PREDISPOSITION.

Most of the assumptions of the humoral pathologists respecting the morbid state of the lymph in tuberculous diseases were extended to the chyle. It will be shown as we proceed, that many of the secretions essential to primary digestion, poured into the stomach and alimentary canal from the vitiated blood in the tuberculous predisposition, are liable also to be vitiated, but I have not more than one direct observation before me of the state of the chyle in tuberculous diseases, as compared with the chyle of the robust and healthy. Schultz states, that the chyle granules are imperfectly formed, and that the fluid in which they float is less plastic in scrofulous constitutions than in health.(a) In tuberculosis the mesenteric, like the external lymphatic glands, are very frequently diseased, primary digestion is often affected, and emaciation occurs, which circumstances have led to the inference that a morbid condition of the chyle exists, and this assumption has formed the basis of some of the most prevalent theories of the disease. But this morbid condition of the chyle is inferred from tuberculosis in a state of active disease, and even Schultz's experiments are made with the chyle of scrofulous subjects. They do not lead us to any conclusion as to the nature and constitution of the chyle in the tuberculous *predisposition*. In the actual state of science we can only arrive at the rational inference,—bearing in mind the low degree of vitality of the blood, and the degraded constitution of the liquor sanguinis, and connecting the morbid state of the blood with certain structural defects from malnutrition of the digestive apparatus, which will be described, and which are attended with a deterioration of the qualities of the secretions essential to the digestion of food,—that the chyle is in all probability imperfectly formed in this predisposition to disease.

OF THE BLASTEMA IN THE TUBERCULOUS PREDISPOSITION.

In the physiological state, the liquor sanguinis, during the

(a) *British and Foreign Review*, July, 1843.

passage of the blood through the different tissues, supplies to each a healthy blastema, liquor nutritivus or material essential to organization. The resources of chemistry and the use of the microscope have not enabled us to investigate accurately the nature of this fluid, since it is difficult to isolate, and, hitherto, has in a great measure eluded our direct investigations; yet, we have reason to regard it as a protein compound; in it are probably formed the cyto-blasts, or germs of cells, from materials derived from the blood, each tissue or structure having a vital affinity for those constituent molecules, or for those cell-germs that are appropriate for its own growth and nutrition. From this blastema the various parts of the organism are built up in a state of symmetry, and maintained in a state of vigour, for the purposes of life. That the blastema supplied to the individual tissues is liable to vary in quantity, and in the proportions of its constituent parts and other qualities, within a physiological range, is shown by individual differences of consistence, colour, form, and proportion of the whole body and its parts. When the blood, and more particularly the liquor sanguinis, becomes deteriorated from any cause whatever, this fluid is also liable to be supplied in a modified or defective state. Although many of the humoral pathologists were aware of this, they attached to it but little importance, attributing certain peculiarities of form, colour, and consistency, occurring in particular constitutions, altogether to alterations in the quantity and quality of the lymph. Gruby (a) found, by direct observation, that under the influence of different forms of morbid action and diseased states of the blood, the white pellucid fluid exuded from the blood-vessels, which may be taken as the analogue of the healthy blastema, varies in its qualities and its constituent parts; thus, the fluid with which the skin is rendered turgid in œdema, contains white or yellowish globules with stellate points. Our knowledge of the laws of cell growth, and of the development of the tissues from cells or otherwise, is excessively limited, but all science teaches that they must be subject to aberrations, and modifications in their results, from variations in the chemical and molecular constitution of the *material* in which they are brought into play. That there may be an excess or deficiency, or an alteration of proportion, or a depravation in quality, of this fluid, is illustrated in various diseases, and the effects of this become manifest in the imperfect or irregular development or morbid nutrition of the tissues, and of the organs of which they form the anatomical elements. In the tuberculous predisposition the vitality of the blood is below the healthy standard, the corpuscles are diminished in number, and the liquor sanguinis is vitiated, and in no constitutional affection are the aberrations of cell development and nutrition more obvious. Although we are not in possession of any direct proof, the conclusion is inevitable, that a morbid state of the blastema, corresponding in its nature with the morbid state of the blood, prevails in the tuberculous predisposition.

The characteristics of the predisposition, habit, or constitution developed from tuberculous blood are—1. Structural; 2. Functional.

1. STRUCTURAL CHARACTERISTICS.

OF THE CELLULAR TISSUE IN THE TUBERCULOUS PREDISPOSITION,

AND OF THE PECULIARITIES OF THE STRUCTURES OF WHICH CELLULAR TISSUE FORMS THE BASIS.

The cellular tissue is unquestionably the substratum of the greater number of the animal structures, and may even be regarded as "the original and common basis of all organised matter." It might be inferred, *à priori*, that the morbid blood of tuberculosis, furnishing a degraded blastema to this tissue, generally, would result in malnutrition of the structures which compose the animal body; and so remarkably is this the case, that the slightest degree of the tuberculous predisposition is characterised by changes more or less universal in these structures. Many of the following facts are drawn from the best pathologists who have written on the subject.

If we regard the *cellular tissue* in its distinct form, a close examination of well-marked cases of this particular constitution leaves no doubt of the degradation in question. When this tissue has been formed from tuberculous blood, its molecules are defective, and held together by a weak vital affinity. This is exhibited by a want of firmness and resiliency; it is soft, pulpy, and glutinous, and maintains most of the characters which it presents in very young animals, or even in the embryo. Its defective structure and low vitality are exhibited by the rapidity with which absorption and deposition take place. Where it appears to be even more than ordinarily developed, by which the delineations of the muscles are hidden, giving a roundness and plumpness to the limbs, as often occurs in children, the appearance is deceptive, and, on close investigation, will be found to depend upon infiltration of fluids rather than nutrition of the solids of the part. Even in cases where a full or excessive nutrition or hypertrophy occurs, the diminished firmness and resiliency, and the facility with which absorption takes place under active exertion, privation from nutriment, or disease, indicate the weakness of the nutrition, and show that, somewhat as in new growths and fungoid excrescences, the tissue is degraded into a kind of vegetation. If the malnutrition takes its rise from the earliest period of embryotic life, is continued during uterine existence, and prevails to a certain degree, this tissue may never regain its normal firmness, but may present, throughout existence, the character which it possesses in young animals, and the structures proceeding from it may never acquire that density which results from cells formed in a well-constituted blastema. These characters apply, not only to the cellular tissue, properly so called, under the surface of the body, and enveloping the various organs, and that constituting the adipose tissue, but to the cells which form the basis of other structures. The most important results of the weakness of cell-growth, and the imperfection of the cellular tissue, are the following:—

1. *In the Vascular System*, the vessels are thinner, more transparent, weaker, more distensible, and less contractile. There is a visible tenuity of the coats of the arterial and capillary systems; the veins, from the weakness of their parietes, are morbidly distensible, and liable to become more than ordinarily conspicuous; nor can it be doubted, that the lymphatics partake of the general tenuity and malnutrition. Many observers affirm, that the vessels of the latter system are larger and more numerous than in the natural conformation.

2. *In the Cutaneous System*, the tegumentary membranes furnish some of the best marked and most unequivocal characters of the tuberculous constitution, and a peculiar organization of the skin especially has, from time immemorial, been remarked as characterising those individuals who are most prone to scrofulous and other tuberculous diseases. In the most clearly marked cases the skin is, for the most part, smooth, soft, and delicate, appearing as if blanched and transparent, the blood-vessels being seen through it. It may be fair or dark; sometimes, particularly in children, it is of a dead white. It frequently happens that the pallor of the skin does not extend to the face, which is ruddy or rosy, or there is a pink tint of the cheek, as if it were laid on with a brush, forming a remarkable contrast with the dead white. In some instances the complexion is dark and puffy, the face being, as it were, inflated; and in infants and children there is often a paleness of the lips and a dirty paleness around the mouth, and frequently a slightly leaden or bluish tint under the eyes. These characters of the skin and complexion, and all the varieties which they assume, are readily explained by the defective organisation of the cutaneous tissues, owing to the defects of cell growth already described; by the weakness and tenuity of the vessels which permeate these tissues; by the altered qualities of the blastema; the infiltrated condition of the cellular tissue; and the peculiar characters of the circulating blood.

Some peculiarities, but far less constant, are found in the appendages to the skin which depend for their nutrition upon the skin itself. The *hair*, in many of the most unequivocal cases, is small in quantity, light coloured, and very fine; but this is by no means a general characteristic: individuals with dark hair are, perhaps, equally affected with some of the varieties of the disease, as phthisis. It has been remarked that children with their foreheads, arms, and backs covered with close-lying dark hair, the eyelashes long and close together, associated with other signs of tuberculosis, are not only predisposed to this disease, but are sometimes "saturated with scrofula," and have a tendency to deposit tubercle in every organ of the body.(b)

The nutrition of *the nails* is very often defective in the tuberculous predisposition, although it may not become mani-

(a) The Microscopical Journal. 1842. P. 234.

(b) Dr. Wilsher.

fest until after actual disease has set in. They have, in some cases, a tendency to become elongated, and very frequently to assume a remarkable incurvation. This appearance, which sometimes becomes a very general and very significant symptom of disease, has been too cursorily regarded, and has received very unphilosophical and inadequate explanations. The nails cannot properly be regarded as unorganized structures. The growth of these appendages, as of the tissues themselves, proceeds by cells formed in a blastema derived from the blood as it circulates in the matrix; and a defective blastema secreted from a morbid liquor sanguinis, here, as elsewhere, produces cells of weak plastic power. If the substance of the nail is in part produced by epithelium scales formed on its under surface, a defective nutrition, as respects these scales, may contribute to the effect; but the chief cause is manifestly malnutrition in the matrix, the posterior and inferior laminæ of which, being formed of fewer cells, and these being possessed of a weak plastic power, may account for the incurvation; a change of form which is ultimately promoted and increased by the shrinking of the extremities of the fingers when the predisposition passes into actual disease.

3. *In the Mucous Membranes.*—The mucous membranes, built up from tuberculous blood, are thin, pale, delicate, and distensible. The strata of cellular tissue, above and below them, being also defective in organization, and their abundant capillary vessels in a corresponding degree thin and distensible, they are morbidly prone, either with or without rupture, to give passage to their contents. No minute investigation has been made of the particular state of organization of the bronchial, intestinal, or generative mucous membranes; but, from the modifications of their functions, which will be described as a part of the tuberculous predisposition, there can be no doubt that the whole mucous tissue participates in the general malnutrition of cells.

The *teeth* frequently exhibit peculiarities. Camper asserted that soundness of the teeth is a peculiar mark of the tuberculous predisposition, and other writers have repeated this observation: a milky whiteness, with a remarkably clear cast, and a denseness and compactness of texture, has thus been described amongst the less constant signs of tuberculosis; some have gone so far as to render this a distinguishing characteristic of a predisposition to phthisis especially, affirming that the greater number of persons who die of phthisis have never had a carious tooth. More modern writers state, that the peculiar organization of the teeth, in this predisposition, renders them more liable to caries; and, in particular, the first teeth are said to be small, and easily affected with this disease. We have certainly seen many cases which bear out Camper's observation, but the converse is undoubtedly also true. Most likely, the teeth present differences of organization, according to the period of life at which this predisposition is observed, as happens with some other structures. They may be prone to scrofulous caries in the young; but, escaping this, the tendency of the nutritive changes may be to render them more compact, and produce the immunity from disease sometimes observed in phthisis. We believe that caries of the teeth is more frequent now than formerly, which may be attributed to some modern customs, as the use of particular medicines or articles of diet,—the organization of the teeth, in the tuberculous predisposition during early life, rendering them more susceptible of the action of such agents.

4. *In the Serous Membranes and other Structures with a Cellular Basis.*—No special observations appear to have been made on the organization of the serous membranes in the tuberculous predisposition, but can there be any doubt that the defect of cell growth is liable to occasion imperfections of structure in all the tissues which have cells for their original basis? The vascular, cutaneous, mucous, serous, adipose, ligamentous, and the animal part of the osseous tissues; all the organs built up of cells, and furnishing gelatine on analysis, give unequivocal evidence of feeble organization. There appears to be a predominance of degraded cellular structure, not only immediately under the surface of the body, and investing the tissues and organs, but in the most intimate parts of organic structures, where it partially replaces the specific tissue. This has been designated an "arrest of development" (a), or "a retrograde morphology." (b) The precise relation which the morbid state of the blood bears to this defect of organization we cannot determine, but the fact ought not to be overlooked, that, within the vessels a vitiated liquor sanguinis corresponds with a diminished proportion, and probably a defective structure, of red corpuscles, and without the vessels a degraded blastema corresponds with a defective cell growth, and probably a diminished proportion of cells; this double pathological condition constituting perhaps the most important phenomenon in the tuberculous predisposition.

(a) Andral. (b) Dr. Addison.

ON THE OSSEOUS TISSUE AND THE SKELETON IN THE TUBERCULOUS PREDISPOSITION.

A deviation from the normal constitution of the blood, and a consequent imperfect, gelatinous, and chondrinous blastema for the development and growth of bone, must necessarily produce defects in the osseous system; and accordingly, an imperfection in the structure of bone and a want of symmetry in various parts of the skeleton have been described, from the period of the earliest observers, as characteristic of individuals predisposed to tuberculosis, or as incidental to the different varieties of the disease.

The changes of structure in the bones, and the modifications of the skeleton in this constitution, although in many particulars very distinct, have not been philosophically investigated in reference to the actual state of science. There is frequently a very manifest retardation of development, as shown by the bones of the head remaining separated at a period when, normally, they should be united, and the epiphyses of other bones being isolated. The bones generally are said to be of less specific gravity than natural, and to yield a smaller proportion of earthy salts; the organisation of the spongy portion is represented as defective, being softer and less compact, owing to which, and to the tenuity of the coats of their vessels and their distensibility, this portion appears to be more vascular than natural. It is also represented as too abundant in proportion to the compact tissue and to the fibrous and ligamentous structures which surround the bones. The animal matter of the bones also partakes of the general defects of organisation which characterise other gelatinous and cellular structures. But very great differences present themselves in the organisation of the bones according to the period of life in which their nutrition has been disturbed by a tubercular condition of the blood and blastema. The peculiarities are most characteristic in those who possess an unquestionably hereditary taint, and in this case they have their origin, apparently, in the blastema of the osseous cartilages being imperfect, and the proportions of the constituents required for the formation of perfect bone being disturbed, the defect of the materials interfering with the ordinary operation of the laws of cell growth. Although the most marked instances of defective organisation and development are referrible to the earlier periods of embryotic and fœtal existence, yet, when the blood becomes tuberculous in later periods of the process of ossification, the effect, although less marked, is still similar. But in after life, when the bones are completely formed, owing to the slowness with which the change of matter takes place, alterations in structure and form are much more rare. Hence, when tuberculosis, as a disease, is acquired in after life, no deviation whatever from the normal state of the skeleton may be observable. When the predisposition to tuberculosis has existed during the period of the development of the skeleton, and never passed into actual disease, the modifications in the size and form of the bones remain permanent; but it would appear that the conservative powers of nature may produce changes of structure of a reparative tendency. Thus, according to an observation of Béclard's, in tuberculous subjects who die of phthisis, the costal cartilages are frequently found ossified at an early age.(a)

The peculiarities of the skeleton in the tuberculous predisposition are extremely numerous and various. Individuals are frequently of small stature, but occasionally they attain an unusual height; extreme cases of young persons under four feet, and as much as six feet four inches high, are mentioned by Lugol as occurring among the scrofuculous. The general form is frequently slender, and indicates at first sight a deviation from the natural proportions. The head is often large, especially posteriorly, the trunk small, the joints large, and the limbs misshapen and often crooked. The forehead is often irregularly developed, projecting, or low and irregular, or uneven, presenting a nodulated appearance at the various points of primary ossifica-

(a "Elements of General Anatomy." By Dr. Knox. P. 218.

cation. The malar bone is often too prominent, the temples hollow, the jaws unusually broad, and the inferior maxillary bone elongated with projecting angles. Sometimes we observe a long neck and a narrowness of the chest, with elevated and projecting shoulders, and for the most part a projection of the clavicles; this narrowness of the chest consisting of a diminution of size at the summit, and a consequent flattening and contraction in front, the arches of the ribs being less convex than natural, occasioning the ribs to recede from the scapulæ, and rendering the latter unusually prominent, which has caused them to be compared with wings by most of the old authors, and indicates a want of capacity in the thorax. The neck is sometimes, on the other hand, short and thick, particularly in some tuberculous infants; and the chest sometimes gibbous or keel shaped, the divisions of the sternum being visible beneath the skin and tilted forwards, the antero-posterior exceeding the lateral diameter, and the ribs variously distorted. The spongy parts of the bodies of the vertebræ are frequently softer and less compact, and the spine is sometimes curved; the pelvic bones are also sometimes irregularly developed; in particular, the pubis, the sacrum, and the ischia, which are occasionally hypertrophied; and the processes of the sacrum are frequently remarkably large. The trunk and the extremities are not proportionally developed, the limbs being sometimes too long or too short. The cylindrical bones of all the limbs are very generally more slender in their bodies than usual, and very frequently enlarged at their extremities, or the whole of the bone is large and clumsy, the cortex or outer wall being thin, and the spongy parts soft. The ankles and wrists are frequently thick, and the spongy part of the carpal and tarsal bones, and the extremities of the metatarsal and metacarpal bones thick and soft. In some cases, the feet and hands attain a disproportionate length. In children the limbs, besides being too long or too short, present large joints, and their various parts appear to be loosely or irregularly attached to each other.

These are the peculiarities of the skeleton generally described as marking the scrofulous and consumptive habit. They are by no means constantly present, or uniformly so in any case. In accordance with a law by which tuberculosis has a great tendency to localise itself as a disease in several places in the same individual, but not universally, the aberrations of nutrition in the osseous system here described are liable to present themselves in particular situations. The contraction of the chest has been laid down as the most characteristic of all the external signs, being, in the less-marked cases, frequently discoverable without any affection of the health of the individual, and without any other malformation. I take these aberrations of nutrition, as a whole, as characterising the tuberculous predisposition, or that state of the habit in which one or the other of the different varieties of tuberculosis are most likely to occur.

On closely examining the peculiarities of the skeleton in the tuberculous predisposition, they will be found to be, in a certain sense, *sui generis*. Modifications of the skeleton are observed in the two sexes, and in the different races of mankind to which those we have described bear no resemblance. They bear no analogy to the peculiarities which distinguish the Mongolian from the Ethiopian, or this from the Caucasian race. There is a certain similarity in the osseous tuberculous predisposition, as it affects different bones, which enables us to refer the peculiar mal-organization to one general cause, whatever that may be. As a whole, the condition of the bones in this predisposition differs also from any other disease. Thus:—

Although the deformities of the skeleton in tuberculosis resemble in some respects those which occur in rachitis, they differ from them in other very important particulars. In the first place, although, as in tuberculosis, the bones are more vascular than natural, their vessels being loaded with morbid blood, the blood itself manifestly differs from that of tuberculosis; it is of a brownish rather than a bright scarlet hue, and is represented by some of the older writers, who observed this disease very accurately, as entirely dissolved, so that it resembles chocolate rather than blood. Again, in tuberculosis there is not that manifest dependence upon mechanical causes as in rachitis; the modifications in the form and direction of the bones are not so obviously dependent upon the weight and pressure they have to sustain. Although, in rachitis, the state of the bone depends in a great measure upon a deficiency of earthy material, and in the tuberculous predisposition there is also, probably, a deficiency of earthy matter, yet the latter disease never produces that uniform softness which occurs in the former; there is in the latter, also, an absence of that tendency to form regular curves, as of the spine and thigh bones, and of that peculiar distortion of the pelvis which characterises rickets; an absence also of the depression of the heads and necks of the thigh bones, of distortions of the joints from a yielding of their ligaments, and also of the progressive ascent of the deformity of the bones from the lower to the higher part of the skeleton, which ordinarily occur in rickets; the lower limbs first yielding to the superincumbent weight.(a) The peculiarities in the individual bones also differ widely; there is not that tendency to form exostosis in tuberculosis as in rachitis. Nor is the difference one of degree only. The modifications of the skeleton in tuberculosis, as compared with those which occur in rachitis, indicate that the development and nutrition are vitiated from a different cause, and that the tuberculous blastema must differ essentially from the blastema of rachitis. Although rachitis and tuberculosis sometimes occur together in the same individual, yet, according to Rokitansky and other modern observers, the two diseases are rarely associated, and that they are not the same disease appears to be corroborated by the fact, that tubercle is less frequently found in children who have died from rickets, than in those who have died from other diseases.

The defects of the osseous structure, and the irregularities of the skeleton in the tuberculous predisposition, like the malnutrition of the cellular structures, properly so called, indicate some specific defect in the material from which the bones are produced, and some deviation from the ordinary course of cell-development. All the malformations of the bones, even the extremes, as of very tall and very short individuals, appear to admit of one general explanation; a low vitality of the cells, rendering them incapable of regulating their own growth and organisation, owing to which an arrest or an exaggeration of development is produced, and the symmetrical formation of the organs prevented. The malnutrition and defective cell-growth, as exhibited in the bones, in tuberculosis, are manifestly in relation to the diminished vitality of the blood, the imperfection of its nutrient elements, and the small number and probably imperfect organisation of its red corpuscles.

OF THE MODIFICATIONS OF THE FIBROUS TISSUES IN THE TUBERCULOUS PREDISPOSITION.

The fibrous tissue in individuals predisposed to tuberculosis exhibits abundant evidence of that malnutrition which might, *à priori*, be inferred from the diseased state of the blood, and in particular from the vitiated quality of the liquor sanguinis and the deficiency of its fibrinous principle. The fibrous structures do not appear to have been very particularly examined; still, in the most unequivocal instances, the malnutrition of the voluntary muscles is obvious. Frequently, although by their size, especially in infants, they appear to be well nourished, that appearance is deceptive. Sometimes they are manifestly defective in colour, soft, slender, imperfectly developed, and badly nourished; hence the muscles are generally described as flabby, and when there is no great fulness of the cellular tissue which surrounds them they are flaccid. It should, however, be remarked, that the malnutrition of the fibrous tissue, as represented by the voluntary muscles, does not appear to be so inseparably connected with the tuberculous predisposition as the defective organisation of the cellular tissue. For it sometimes happens that where the predisposition exists without actual disease, the modifications of structure dependent upon defective cell growth are highly marked, while the muscular development and power continue perfect, and it is not until actual disease supervenes that the nutrition of the muscles begins to suffer. I have known youths hereditarily predisposed to tuberculosis with very strong marks of the consequent defects of cell growth in other structures who exhibited extraordinary muscular development and power. The bearing of this remark will appear when we have to regard tuberculosis as a disease.

I meet with no remarks on the nutrition of other fibrous tissues, as the fasciæ, &c., in the tuberculous predisposition. The condition of the involuntary muscles, and especially of the heart, will come under consideration in the next lecture.

[To be continued.]

(a) Stanley on the Bones.

ORIGINAL COMMUNICATIONS.

ON THE TREATMENT OF CEREBRAL HYSTERIA,

AND OF MORAL INSANITY IN WOMEN, BY ELECTRO-GALVANISM.

By Dr. LAYCOCK.,

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There is a disorder of the feelings, sentiments, and affections, which, when intense and permanent, constitutes moral insanity, but, in a minor degree, may be termed cerebral hysteria, and to which women with certain mental and corporeal characteristics are specially liable. It presents itself under the three forms of exaltation, depression, and perversion, —the latter a state often compounded of the two former. It depends on a functional disturbance of the cerebrum, but primarily and principally of that portion which is the organ of the instincts and emotions,—for there are no delusions or hallucinations, and no disorder of the intellect, except in the advanced stage, when the functional disorder has become chronic, and mania, melancholia, or imbecility, has supervened. In its mildest forms, the disease is one of the most common to which the sex is liable, and, as constituting the primary or incubation-stage of moral insanity, it is one of the most distressing. It is also, when fully established, to be classed amongst the most incurable; for, although the intellect may be sufficiently restored to render the restraint of an asylum unnecessary, there often remains a permanent change in the character of the individual of a very distressing kind, because it gives the appearance of moral depravity, and too often really induces it. The gentle, truthful, and self-denying woman has unaccountably become cunning, quarrelsome, selfish; piety has degenerated into hypocrisy, or even vice; and there is no regard for appearances, or for the feelings or interests of others, except in so far as they may minister to the vanity or selfishness of the patient. In short, there is such a complete perversion of the character, that, when compared with the natural disposition and feelings, it can only be considered as a state of disease, and the result of previous changes in the encephalon.

The remedy I have to recommend as prophylactic and curative in cases of this kind is the persevering and systematic application of electro-galvanism to the abdominal and pelvic regions in combination with other means; but, previously to mentioning the details of treatment, I will give a short historical sketch. The affection (if we consider the whole series of phenomena as constituting one disease) may be considered under three or four successive phases. There are—1. What may be termed the etiological stage; the stage of causation; 2. The stage of incubation; 3. The stage of manifest cerebral disorder, showing itself in various forms and degrees of mental aberration. The etiological stage, or that in which the causes of the disease are in operation, is characterised by a general derangement of the health of no very specific character, and with little, if any, observable change in the feelings or temper. There are unusual languor, irregular appetite, epigastric pain, and other symptoms of indigestion; constipation, together with irregularity in the uterine functions, either as regards the recurrence of the periods or the quantity or quality of the menstrual discharge. As the disease advances, all these symptoms are aggravated; the gastric symptoms become more urgent; the urinary secretion is irregular, and the bowels are more constipated; there is dysmenorrhœa or amenorrhœa; a dull aching pain is probably felt at the lower half of the sacrum, with pains in the hips, weary aching of the legs, and more or less œdema of the feet and ancles. A manifest alteration may now be observed in the patient; the complexion is muddy or sallow, the face pinched, and the person generally much thinner. The countenance exhibits a settled expression of anxiety, and the usual cheerfulness is changed for habitual gloom. The *stage of incubation* has commenced, and as it advances, the cerebral functions begin to be disordered permanently. The patient becomes fickle, restless, impatient; is often depressed, often excited to anger by trifles, and is alternately dissatisfied with herself and those around her. She can scarcely say what ails her; she, perhaps, carefully conceals or misleads as to some of her symptoms; and their variety and apparent incongruity often puzzle her medical adviser as well as her friends. Much is attributed to bad temper, or to the indulgence of foolish caprices; much to "biliousness" or "indigestion," or the obstinate constipation of the bowels; and if there be spinal tenderness and hysterical symptoms, it is apt to be considered simply as a case of hysteria or spinal irritation.

Up to this point the affection is hardly beyond what was formerly termed "the vapours," and it may not advance beyond this point; if, however, it be progressive, more decided symptoms show themselves. The temper is more easily roused, more unreasonable, and more unmanageable; the patient manifests a selfish cunning and deceitfulness altogether foreign to her character, and surprises her friends by unusual mental and bodily activity, while several of the earlier symptoms may even disappear altogether; but the greater activity is only the restlessness and fickleness of the preceding stage more fully developed, and at last it is accompanied by traits of character which seriously alarm the friends of the patient. She will desire to do or to possess everything she sees, or sees done, or even thinks of. She will write much, read every variety of book, and undertake every variety of work, and change her mind a hundred times a-day. At last she appears to have lost all power of decision, and a state of mind comes on which may be termed volitional chorea; for, just as in common chorea, the muscles respond indeterminately to the will, so in this kind of case they will respond indeterminately to the ideas, and acts of the will follow upon any passing impression on the mind. Thus, if the patient has resolved to read French, the mention of the piano or of music in conversation will determine her to give up the French for a little music; but she has hardly seated herself at the instrument before she determines to draw for a while. If left to herself, she seldom, if ever, completes her purpose; and sometimes the ideas that arise in the mind are so unconnected, that a character of great eccentricity, if not of actual insanity, is stamped upon her actions.

Each case will, of course, present peculiarities according to the education, habits, and constitution of the individual, and accordingly as certain instincts and classes of ideas predominate. It is to be observed, however, that in this stage there are no illusions or hallucinations as in true mania, although the disorder of the volition I have described may be so aggravated as to assume the character of *impulsive insanity*, in which case the will is so subjected to any passing idea, that actions are performed from a sudden impulse or desire which are truly insane in their character. It is not always, however, that the cerebral disorder, on which this absolute subjection of the will to impulse depends, is ushered in by premonitory symptoms, especially when it appears in very young or in parturient females; and, even when premonitory symptoms really exist, the singular ingenuity and cunning with which the patient explains away or conceals her foibles and follies, impose upon the inexperienced and disarm suspicion, until some very strange, or even criminal, action puts the case in its true light. The transition from this state, if the disease go on unchecked, to confirmed insanity, is only a question of time; but the peculiar form of mental derangement will differ, according to circumstances I need not here enumerate, and may be mania, melancholia, hypochondriasis, or only monomania.

As the form which the disease assumes in its successive stages is never alike in any two individuals, so its causes vary. Primarily, in all in whom the cerebrum is decidedly involved, there is an existing predisposition to mental disease or cerebral disorder, either hereditary or acquired. Then functional or structural disease of various viscera has a direct incident excitor action on corresponding portions of the cerebrum and cerebro-spinal axis, and so induces local excitement and disorder therein. Thirdly, visceral disease leads to a morbid condition of the blood, so that the nervous system is injuriously acted upon from another quarter, and a general *neuræmic* condition is induced. This condition I have specially considered in my work on the Nervous Diseases of Women, and its relations are very important and extensive. I do not propose to discuss these etiological questions at length, as I have only to trace such a general outline as will enable the reader to recognise the affection, and understand the *modus operandi* of the remedies.

Those who have paid any special attention to mental disorders, must have remarked how frequently diseases of the viscera are incident exciting causes of insanity. It is to be

remembered, however, that slight changes in the temper and the feelings, arising from similar causes, are also dependent upon functional disturbance within the cranium, and belong, etiologically and pathologically, although not nosologically, to the class of cerebral diseases involving the mind. Disease of the heart frequently induces a most painful irritability of temper, or a morbid depression; disease of the stomach and liver will cause hypochondriacal feelings, and a depressing sense of anxiety about the future. Irritation of the intestinal canal will induce various forms of cerebral irritation, from epilepsy to mania; while uterine and ovarian irritation, which, in its slightest forms—as when connected with the monthly period in females—almost always exercise more or less influence on the temper and feelings at that time; operate also, indirectly, on the nervous system, by impairing the functions of *the kidneys*, and so rendering the elimination of the urinary salts from the blood imperfect. It is, however, to the direct and permanent morbid action of the ovaria on the cerebrum, that the change in the instincts and feelings is due, which I have described, and which invests the patient's actions with an unfeminine character, perverting all the feelings and sentiments connected with the sexual functions, either directly or indirectly, and so exciting insane cunning, destructiveness, infanticidal impulses, morbid appetites, &c. It is not possible always to say in what this morbid condition of the ovaria consists, nor, in many cases, how it arises, although, in a large proportion, it is evidently connected with displacement, congestion, or ulceration of the uterus or its cervix. Whatever may be its exact nature, when thus complicated with uterine disease, it draws the kidneys, stomach, and intestinal canal into the chain of functional disorder, and these re-acting upon the cerebrum and cerebro-spinal axis, and the latter on the former, we have the whole series of phenomena developed in its various modifications, according to the modifying influences of individual predisposition.

Hence it is of primary importance that the utero-ovarian disease be checked, and that the gastro-intestinal functions be restored to a healthy condition; for, unless these indications be fulfilled, there is little hope that the cerebral or cerebro-spinal disorder thence resulting, will be cured, or even palliated. The various remedies which are in ordinary use for these purposes,—as hip and foot-baths, leeches and counter-irritants to the spine, chalybeates, purgatives, enemata, sea-bathing, &c.,—are uncertain in their results, for, in many cases, we cannot even check the constantly increasing tendency to constipation. Now, it is as an aperient and emmenagogue that electro-galvanism, used in the mode mentioned, is most beneficial in these cases; and, without entering into any theory as to its *modus operandi*, I will state, that it is the most efficient remedy for this purpose that I am acquainted with. In proportion as it fulfils the indications of cure, by restoring the due action of the intestinal canal, and of the kidneys and ovaria, the morbid cerebral phenomena disappear, and the mind returns to its natural state. In one case under my care, in which there was the morbid condition of the will, I have described in a most marked form, and a concomitant painful alteration of the character, the remedy was eminently successful; in three weeks the bowels were moved daily without purgatives or enemata, although these had been necessary for three or four years previously; the patient gained considerably in weight, improved daily in mind, and in four months the menses re-appeared, after having been wholly suspended *for five years*. The latter result was the more remarkable, inasmuch as the patient presented certain external characteristics which usually indicate atrophy of the ovaria.

Although the use of electro-galvanism as an emmenagogue is no new thing in medicine, it is to Dr. Cumming of Edinburgh that we are indebted for much valuable, and, I think, *new* information as to the class of cases, and the mode in which it may be most advantageously applied. I would particularly refer the reader to Dr. Cumming's paper "On the Use of Electro-Galvanism in a peculiar Affection of the Mucous Membrane of the Bowels," published in the *London Medical Gazette* for 7th December last, and also to an Appendix to that paper, in the same Journal for January 18th last, where he will find ample instructions as to the best mode of applying the remedy, the precautions that should be taken, and the adjuvants that should be administered. I have reason to hope that Dr. Cumming will shortly make the results of his further experience public; and I am glad to have this opportunity of stating, that his hitherto published experience is amply confirmed by my own. I am satisfied that we have, in this method of treatment, a means of curing or alleviating many of the large class of cases (not exactly indicated by Dr. Cumming) of which I have given a short notice, some of which are now hopeless inmates of hospitals for the insane, while others, hovering at home on the verge of insanity, are a continual source of domestic misery.

I might here append some extracts from Dr. Cumming's paper, and the appendix thereto, but I think it would not be doing the writer justice; I will, therefore, only add one or two points necessary to be observed in the diagnosis of the early stage of this class of affections. The gastric derangement is the most distressing, and is characterised by a sense of uneasiness and depression at the epigastrium, accompanied by an undefinable anxiety and restlessness, usually the most intense at an early hour in the morning. The bowels are generally much constipated, the tongue scabrous, or presenting a rough, *fissured* appearance, the complexion muddy, the countenance grave, or peevish, or anxious. These symptoms being observed, attention must be directed to the uterine functions; and if leucorrhœa, or symptoms indicative of uterine congestion, displacement, or structural change, or of ovarian irritation, be found to exist, then the gastric or gastro-enteric phenomena must be considered as in etiological relation to the pelvic, and the daily local application of electro-galvanism, in the way pointed out by Dr. Cumming, will be the best remedy. Amongst the adjuvants that should be administered concurrently with its use, tar, in small doses, has been found to be the most effectual,—a remedy that we owe, I should add, to Professor Simpson,—and which is itself an excellent remedy for habitual constipation, without the aid of electro-galvanism.

CASES OF POISONING,

AND OF

MALICIOUS DISFIGURING OF THE PERSON BY MEANS OF SULPHURIC ACID, WITH REMARKS.

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Lecturer on Chemistry at the London Hospital.

Within the last few weeks, three accidents of a serious nature have resulted from the improper use of strong sulphuric acid. Two of these came under my own notice at the London Hospital; and, as they present many points of interest to the toxicologist, I am induced to record them.

Case 1.—James Ross, a little boy aged 6 years, was admitted into the Hospital, under the care of Dr. Cobb, on Sunday, April the 21st. Half an hour before he was admitted, he drank about a tablespoonful of strong oil of vitriol from a cup, given to him by a child of his own age. When he came to the hospital, his chin and lips were excoriated; the mucous membrane of his tongue, mouth, and fauces was of a pearly-white colour, and it was covered with a white viscid secretion. The front of his dress was reddened, and corroded by the acid. He complained of great pain, and of a burning heat in his mouth and throat. There was constant retching; and he threw up a glairy fluid mixed with numerous small shreds of coagulated membrane. The pulse was quick and feeble, but there was no sign of collapse, no heat or coldness of the skin, no anxiety of countenance, and no pain in the abdomen. In fact, there was such a complete absence of all urgent symptoms, that those who saw the child were led to believe that very little of the poison had gained access to the stomach. He was, however, treated with chalk mixture, and subsequently with magnesia diffused through a mucilaginous drink. Twelve hours after his admission, he voided four ounces of clear amber-coloured urine; and, on submitting it to analysis, I found that it possessed a very strong acid re-action; that its density was 1030, and that 1000 grains of it yielded 54 grains of solid residue. Half of this residue was soluble in alcohol; and as the alcoholic solution showed signs of the presence of free sulphuric acid, I am disposed to think that the urine contained a super-sulphate. The insoluble residue furnished 16·9 grains of sulphate of baryta, a quantity which represents 7 grains of the strongest oil of vitriol of English commerce, or 12·5 grains of sulphate of potash, the salt

actually present: so that the 4 ounces of urine must have contained at least 24 grains of alkaline sulphate.

It is unfortunate that the urine was not examined for the next ten days, but at the expiration of that time I found that its density had sunk to 1026, and that 1000 grs. of it yielded only 2·6 grs. of alkaline sulphate; a quantity which is a little below that of the normal standard. On the 3rd of May the boy was discharged from the hospital cured; and the only peculiar symptoms which occurred during the progress of his recovery were those of constipation and of diuresis.

I have recorded this case because it presents many points of resemblance to one which is reported at page 115 of the first volume of the Pathological Society's proceedings. In that case, as in this, a very young child recovered from the effects of a large quantity of crude sulphuric acid, most of which passed out of the system by the kidneys. And, to complete the account there given, it may be mentioned that, although nearly five years have elapsed since the boy last named suffered from the effects of this poison, yet he is now quite well, and has had no symptom of dyspepsia, or of any other gastric disease.

Case 2.—Early on the morning of Wednesday, May 22nd, George Argent, aged forty-two, and Charles Argent, his son, aged nineteen, were admitted as patients into the London Hospital, in consequence of the severe injuries produced on their persons from the contact of strong oil of vitriol. The father stated, that about four hours previous to his admission, he and his son were summoned to the front door of their house by a loud knocking. On opening the door, he was addressed by a woman, Sarah Smith, with whom he had lately quarrelled; and, before he had time to reply, she threw a quantity of liquid in his face, a part of the fluid falling upon his boy, who stood behind him. They immediately felt a severe burning sensation, especially in the eyes, and ran to the water butt "to quench it." A surgeon was promptly sent for, who gave them a lotion; but, finding that the pain was still very acute, they came off to the hospital. When they were admitted their eyes were much inflamed, the lids were swollen, and the right eye of the father looked dull and opaque; their faces were covered with numerous red spots, which in the course of a few hours scabbed over and became brown. The parts affected were washed with mild alkaline lotions, and the boy soon got well. The father, however, was not so fortunate; for, on the fourth day after the accident, the conjunctiva of his right eye acquired a jelly-like consistence, and on the eighth day the cornea, which had all along been opaque, sloughed away, giving exit to the lens and a portion of the vitreous humour. For more than a week after this the eye continued to be inflamed, and it discharged large quantities of purulent matter. In a few days the more urgent symptoms abated, and then, as the man was obliged to leave the wards of the hospital, where he was under the care of Mr. Adams, he was made an out-patient. At the present time the eye is still suppurating and gradually wasting away.

The woman, Sarah Smith, was taken in custody; and I was requested by the magistrate to analyse a small quantity of liquid contained in a jug possessed by the prisoner, and also to examine some red and yellow stains which were upon the garments worn by her and the Argents.

The liquid in the jug was a weak oil of vitriol, for it had a density of 1316, and contained 42 per cent. of free sulphuric acid. It appears, however, that the acid, when sold to the prisoner, had a density of 1640; so that the liquid taken from the jug must have become weak from the absorption of atmospheric moisture. In confirmation of this, it may be stated, that if, at this time of year, we take 100 grains of strong sulphuric acid, (sp. gr. 1842,) and expose it freely to the air, it will, in the course of four days, absorb about 120 grains of water; by which means its bulk will be increased threefold, and its density lowered to about 1340. If, however, we experiment with a larger quantity of sulphuric acid, the relative amount of water absorbed is not so great; for, to give an instance, if 1000 grains of oil of vitriol, of sp. gr. 1842, are exposed to the air in an open saucer, they will, in 24 hours, absorb only about 230 grains of moisture; in 48 hours, they will take in about 430 grains; in 72 hours, about 580 grains; in 96 hours, about 690 grains; and in 120 hours, about 770 grains: showing that an analysis of acid, thus exposed to the air, furnishes no indication of the original strength of the liquid; and, to complicate the difficulty, it may be mentioned, that, while a strong acid becomes weaker in consequence of this exposure, so a very weak acid becomes stronger, for both of them soon arrive at the same density, viz., at about 1310.

The spots on the garments were damp and sour, and the tissue was found to be rotten. By digestion in water, and also in alcohol, they yielded solutions which gave abundant evidence of the presence of sulphuric acid. These facts were deemed sufficient to justify the prisoner's committal; and on Friday, June the 14th, she took her trial at the Central Criminal Court, where she was indicted for feloniously casting and throwing upon George Argent a quantity of vitriol, with intent to maim and disfigure him. She was found guilty, and was sentenced to be transported for fifteen years,—the learned Judge, Mr. Baron Rolfe, remarking, that the crime of which the prisoner was convicted was a most atrocious one; that no man, not even the strongest, could protect himself from it; and that it therefore merited severe punishment.

The *third case* to which I have referred happened about a month since, and came under the notice of Mr. Parker, of Duke-street. I am indebted to the *Daily News*, and to Mr. Parker himself, for the following report of it. On Friday, May 24, an inquest was held on the body of a young woman who was found dead, in a sitting posture, in a room of the London-bridge Tavern. The landlady deposed, that, when she was passing the room, at half-past eleven o'clock of the evening of Thursday, she saw the deceased, apparently dead, seated in a chair, with her face blackened. She sent for a surgeon, Mr. Parker, who told her that the woman was quite dead. There was a bottle, marked "sulphuric acid," in her hand, and it still contained a portion of oil of vitriol. Mr. Parker was of opinion that the woman had been dead two hours, and he further believed that she had died from suffocation, but little of the poison having, in his opinion, reached the stomach. Another witness informed the jury, that the deceased had purchased two pennyworth of strong sulphuric acid only a few hours before her death. The body was not claimed, and the coroner recorded a verdict without giving directions for a *post-mortem* examination.(a)

The preceding cases, occurring as they have within a very short period of each other, show that the sale of vitriolic acid ought to be placed under proper restriction; for at the present time, oilmen and grocers, as well as druggists and apothecaries, are accustomed freely to deal in this poison, notwithstanding that there is no real occasion on the part of the public for the employment of a concentrated solution of it. Manufacturers, dyers, and chemists, make use of sulphuric acid in the bulk; and they, therefore, should be compelled to purchase it of the wholesale dealer, and to keep it where it is not likely to be the source of danger; for, to judge from the many fatal mischances which are yearly recorded, this acid is not only resorted to as a means of effecting wilful harm, but it is also the frequent cause of accidental injury. It has been given to children for castor-oil; has been drunk by adults for porter; and has, more than once, been thrown into the intestines for a clyster. In point of fact, the Registrar-General states in his 6th Annual Report, that no less than 15 children died during the year 1840 from the effects of oil of vitriol, which was either given or taken by mistake; and, in the parliamentary report for the years 1837 and 1838, it is declared, that out of 474 deaths by poisoning, 32 resulted from the improper use of strong sulphuric acid. The majority of these occurred among children; and, to quote from Dr. Chowne's Clinical Lecture on this subject, "they constitute a melancholy catalogue of carelessness of an extremely culpable kind; for, in all of them, the verdicts record that the deaths were caused by accident or mistake. In eight of these cases the nature of the accident is not stated. In six of them, the vitriol was given by the mothers or nurses in mistake for medicines, to four it was given by mistake for Godfrey's cordial; to one for castor-oil; and to one, for syrup of rhubarb. In the remaining six cases it was left in places accessible to children, three of whom took it in mistake for ginger beer." Add to

(a) Since the preceding article was written, Dr. Gull and Mr. Parkes have made an examination of the body. They found, as was suspected, that the poison had not reached the stomach, but it had eroded the epiglottis, and had passed down the trachea into the lungs. The rings of the trachea were quite dissected out by the acid, the lungs were charred by it, and the poison had actually escaped into the cavity of the pleura, and had dissolved the subjacent ribs on the left side, forming a crust of sulphate of lime upon the surface of the lung. The thoracic vessels contained a solid magma (disorganised blood) which looked like dried blacking.

all this the fact, that most of the vinegars of commerce; and, as Dr. Ure states, all the pickles in which our *bourgeoisie* so much delight, are polluted and sharpened up by strong doses of sulphuric acid, and we shall have little hesitation in concluding, that the sale and use of this poison ought to be placed under proper restrictions.

EXTRACTS

FROM THE

DIARY OF A DISPENSARY PHYSICIAN.

"Rely not alone upon silent and dumb remembrances."

SIR THOMAS BROWNE.

TEN years of hard dispensary work, more than half of which time has been occupied with the duties of one of the largest institutions for general maladies in the metropolis, as well as with those of an establishment for a special and important class of affections, may entitle me, I trust, to note down a few records of the experience I have gained, and which may perhaps meet the eye of some just entering on the duties of the public service, or about to tread the pathway which I for ten years have trodden. This service is to the young physician one of incalculable and enduring benefit. It is the keystone of the arch upon which hereafter is to be built that professional career which he looks forward to seeing exemplified in other channels than those afforded to him simply by patients of the public benevolence and charity. The benefits to be derived by the young physician from a dispensary are of a twofold character. first are to be remarked the great amount of all forms of disease he meets with, and consequent facility of, as it is termed, seeing a large extent of practice, and this the more especially in those institutions in which the visitation of the sick at their own homes is constantly and peremptorily insisted on; secondly, the power he gains in decision, in the readiness of and confidence in the use of remedies. This latter attainment I regard as of paramount utility, and as an attainment scarcely to be arrived at without the advantages of extensive public practice. Upon these two great classes of benefit I shall make a few observations. Medicine is both a science and an art, a science in the establishment of certain well defined and permanent principles, the carrying out of whose teachings and indications leads us to equally well defined and generally extensive results. It is an art, seeing that the exemplification or putting in force these well established *axiomata*, forms but a very small amount of that necessary to be carried out in the practical working of medicine at the bed-side of the sick, but which is greatly constituted of the enforcement of things learned alone by experience, or knowledge gained purely and simply by *à posteriori* information, and not to be reasoned out *à priori*, and applied as fundamental unvarying laws. That a certain knowledge of scientific medicine can be obtained, and be ready for future practice with surety of benefit, in him whose amount of clinical experience is very limited, is no doubt the case, and of such must be of course the young physician's knowledge in the majority of cases when commencing practice. But when he begins the more responsible duties of his professional career, he soon discovers how very great is the amount of information which he can alone obtain from bed-side observation. He discovers that the physical, chemical, and physiologic principles, elucidatory—or, at least, supposed to be so—of morbid action, help him far less than he imagined when at the side of the sick, and he becomes inclined to believe, that experience in this locality alone, is the great fountain from which will spring the rule and guidance of his responsible and precarious duty. It strikes him that he treats not diabetes a whit the more successfully for all the abstruse chemistry which has been lavished on it of late years; that rheumatism and gout, in spite of the repeated analyses of blood, urine, and perspiration, are not more favourably conducted to a cure than they were twenty years before him; and that Bright's disease of the kidney was as ably managed, therapeutically, by its practical and first elucidator as it is now, and after the special volumes, monographs, and papers which have been written upon it in relation to transcendental anatomy and physiology, and symbolic chemistry. He finds that the test-tube and the microscope lessen not the devastations of the plague of the Delta of the Ganges, nor that the treatment of the scurvy, during the failure of the potato crop, was superior to that put in force in the navy, years before this failure happened. He thinks it may be interesting to know whether there is such a thing as a true cancer-cell or not, visible under high powers of the microscope, but discovers the knowledge to be practically useless; and he might like to be satisfied upon the fact of the vascularity or non-vascularity of tubercle, although he is aware that the great point—the treatment of tuberculosis by cod-liver oil — has been the result of the purest *à posteriori* knowledge, experience, or empiricism. In fine, he becomes satisfied of this, that one year's attendance at the bedside of the sick man is worth, for his aims and purposes, twenty years' labour in the laboratory or with the microscope. But notwithstanding many of the deficiencies he will find in the aid, which scientific or formal medicine is capable of giving him in actual practice, the young physician will have to guard against the solecism of denying the value of it altogether; on the contrary, he will discover that it will often be to him of great avail, giving a broader and more catholic spirit to his inquiries, and helping to the elucidation of many points without which the thing signified in the symbol would never have been seen. The recoil, however, to the denial of the value of a scientific medicine is more likely to belong to the second period of the physician's practical career; but in some cases it arrives very early, it is true. And this is not greatly to be wondered at. For five years, it may be—at least it was so with me, and many whom I know—he has been going through a course of theoretic, scientific, or fundamental medicine; he has, perhaps, become skilled in the chemistry and physiology of his day, and dipped into the various collateral branches of pure medicine, sufficient, as was considered, to help his consideration of the economy of the living being. He has listened to the building up of a whole doctrine of pathology on physical, chemical, and physiologic principles, has been informed that his course of clinical medicine will be a practical exemplification of the value of this application of them, and that his therapeutic inductions are to run hand in hand with their indications. Then is added an amount of hospital attendance, every iota of which experience is made in his eye to prove, or is believed capable of proving, if he took the trouble of interpreting it, the truth of the scientific, theoretic doctrines he has previously been imbued with. The schools are left, and he becomes launched on the great wave of the professional ocean. Near the strand rests his bark, ready for the service of any who may want it. But, alas! no one seeks a passage of him; his diploma exists in proof that he has studied all the sunken rocks and shallows, and, it may have been spread abroad, that not only is he fitted for his ordinary avocations, but has become an adept in extraordinary ones as well, to fit him as a pilot to others; in fine, as a physician. But it avails not, the world itself demands a practical knowledge of simple navigation; and his professional brother, the general practitioner, as he is termed, before he will dream of seeking his pilotage, demands of him practical experience and knowledge of the difficulties of the stream. Mere University education,—mere theoretic, scientific knowledge, then, he finds of no utility so far as his progress in the world extends. The public and the profession demand one thing,—proof of clinical experience, and this extended. Probably a Medical Society is next entered. For a series of evenings he hears read and discussed some so-called "practical papers;" a few points in diagnosis are long dwelt upon; some few cases or minutes read, illustrative of the details of a special rule of therapeutic practice. The Society consists chiefly of hard-working general practitioners, who listen with attention, and debate with interest. He is surprised; to him they are lingering on ungenial, or often almost unknown lands. He sees, as he terms it, nothing philosophic, nothing scientific, nothing broad, general, and fundamental in all their inquiries. He may possibly find, it must be confessed, some loose reasoning, but slight knowledge, or even very decided ignorance, of elementary physiology and chemistry, and next to no acquaintanceship with the use of the microscope and test-tube. This startles him,—he would fain bestow upon the society, or desire that others should, something scientific, something philosophic, something general. He would not have the microscope or test-tube forgotten: strange out-of-the-way morbid specimens, pathologic curiosities should be exhibited, and then all enveloped in a clothing of physiologic discussion. But with all this, and though his grammar might be correct, his quantities right,

nay, his diction elegant, if not rhetorical, he might not bestow upon the members one-tenth part of the value and advantage they have gleaned from their so-called practical papers. The probability is, in the long run, that he himself discovers it to be so, and is forced to confess that, although he might have done something much better in another way, yet in their way he could perform nothing. As he must live, and is desirous of a standing, he therefore defers to the profession, and to the public, and takes measures accordingly. He gives up all idea of private practice and remuneration until he can produce evidence of his experience as a clinical or practical physician. The first opportunity for his new field of exertion is embraced, and, in all likelihood, he becomes connected with a dispensary, as affording advantages for bedside observation. He soon discovers the new light that is to shine upon him,—he now discerns what a vast acquisition is *experience;* and, as I have before said, even thus early, a recoil may take place, and even pure apostacy from his former faith ensue in consequence. Be the value of formal or scientific medicine, however, what it may, of that which will thus accrue to the young physician in his new engagements, there can be no doubt whatever; he will see as I before remarked, *a large extent of practice.* This will embrace not only that extended list of slightly acute affections and chronic ailments which still permit the patient to attend, though it may be often with discomfort to himself, to his ordinary avocations, but also where visiting the sick at their own homes is enforced, the more acute, severe, and frequently rapidly fatal diseases, which demand promptitude of decision, energy of action, a correct diagnosis, with judicious therapeutics, unhesitatingly carried out. One great advantage of this wide extent of practice is especially seen in the experience to be thus derived during the prevalence of particular epidemics. It not unusually happens, that such diseases make their appearance amongst the patients of a dispensary before the better classes of the social community are attacked, and hence the physician comes prepared for his duties amongst the classes alluded to. His knowledge thus gained, will constantly enable him to better satisfy the friends of his patient, as to the probable prognosis of the complaint of the latter,—a point of great importance, and one upon which, for several reasons, the attendant of these classes is constantly questioned. We have more than once been requested to see a patient, well to do in the world, affected with slight febrile indisposition and sore throat; fears have been entertained that these were the beginnings of a severe and important malady. We have been questioned as to the probabilities of a "quinsey" supervening, of a "bad fever," &c., and on the duration and result of the disease. Our fortnight's previous work at the dispensary has led us to intimate, that the patient is attacked with a prevailing epidemic, that its course is usually mild, and that no fears need be entertained. For our own satisfaction, too, we have readily been able to determine the most advisable course of therapeutic interference. So, again, have we known scarlatina, of a peculiarly bad form, or one more than ordinarily apt to be followed by dropsy, to be for some little time prevalent amongst the children of the poor. The knowledge of this fact was highly serviceable in the after-attendance upon the children of the rich; the hint given as to the complications of the attack of the epidemic, the foretelling of the disease which would in all likelihood follow, bestowing credit upon the physician, thus beforehand under discipline, and timely prepared. Involved in this experience of witnessing extent of practice, is found another gain of no little import to the practising physician. It is this,—the knowledge he obtains of what may be termed *exceptional cases;* which cases to him, however, become less and less exceptional, and nearly as familiar as ordinary forms of disease. When another may be puzzled, he is not so; when another is in doubt, his diagnosis may be sure; or, *vice versa*, when from less experience a diagnosis is rapidly arrived at, but a wrong one, he is guarded, weighs probable contingencies, and commits no error. Where others find no difficulties, and decide accordingly, but in a wrong decision, he sees the mistake which might happen, and escapes. Thus, a limited experience will never find any difficulty in deciding between measles and scarlatina; it believes there is no difficulty; it supposes these diseases always as distinct as possible. A more extended one knows just the reverse: it affirms that, during certain epidemics, children are attacked with such a peculiar form of affection, that it is impossible to affirm it to be either the one or the other of the above maladies. The former never heard, perhaps, of such an affection as *rötheln* or rubeola, distinct from measles or morbilli, and scarlatina. Just so, too, with variola and varicella: they are always and ever distinct to the former, as regards their eruptions; whilst the other, so far as the latter is concerned, is now and then puzzled. So, too, with respect to hyderencephalocele and cephalhæmatoma: the one never saw a cranial protuberance of these classes which was not perfectly easy to be diagnosed; the other has discovered quite the reverse in his more extended experience.

The feelings attendant upon three circumstances in a professional career are not to be envied; at least, we are practically so certain of two, and we have every reason to believe the like of the other. These feelings are those accompanying our attendance on our first labour, on our first rich patient who is really seriously ill, and on our first operation for lithotomy. In the first, the whole process is new to us, and what we have to perform with respect to it; we know not whether it shall be a case for turning, for instruments, of flooding, of retained placenta, &c., &c.; and dread of all unfortunate possibilities rushes upon the mind, producing a state of feeling by no means lessened by the scrutiny, questions, suggestions, or insinuations of the attendants of the female or of the lying-in room. In the second, our misfortunes are of a twofold character: our want of confidence, our inexperience, our dread of, if not actual, want of knowledge; and, further, all the hopes and fears of prospective advantage or misfortune, according to the scale which shall rise,—our very professional life seeming to us to depend upon this sick man's restoration to renewed vigour. In the last, it is not to be wondered at that our first performance of the highest capital operation of surgery shall cause some trepidation and misgivings. How different, again, the feelings, under the above circumstances, when undertaken after a year's education in the public service! How decidedly, too, we determine upon the propriety of administering mercury to affect the system!—how calmly we await the result!—how irrespective of all prejudices, dislikes, &c., &c., we insist on certain forms of therapeutic interference, when we deem them necessary!—how coolly we consider them as they are done! How many useful and potent drugs we fearlessly employ on the rich patient, after our administration of them to the poor! How invaluable is not the experience gained at the dispensary, amongst the females, found when we are brought into contact with women of the better classes of the community! Nay, our very inquiries into certain particulars with regard to the health of the latter are divested of that hesitation, dread of offence to modesty and awkwardness of questioning, in which alone, to the upright practitioner and patient, all that is really to be feared lies. In this class, too, there are certain affections whose peculiar and proper treatment we would scarcely venture on without the education and experience, with the resulting confidence, a dispensary affords. The perceptive faculties of women are well known to be acute, and they are plied to their full extent, both in high and low, on the first contact with a new, and especially young practitioner. Any *gaucherie* is at once detected, and the exemplification of the slightest want of the *savoir faire* may lead to the distrust, discountenance, and loss of the patient, if not to her ridicule. A knowledge of and ready use of resources, is another great boon of dispensary practice. All our power of diagnosis, prognosis, and scientific or theoretic reasoning will avail us little in the eye of the patient and his friends if our ponderings be not followed by action. "In vain," says M. Simon of the Physician, "by a sophism which the love of lucre may inspire, may he seek to persuade himself that, in confining himself to the simple prescriptions of *hygiene*, or the precepts of abstinence, he cannot hurt the sick who trust in him, and that he is even useful in preserving them from a system of therapeutics which he thinks fatal; *a priest without faith*, he sports with the credulity of his victims; his life is a continual lie."—*Mackness. Moral Aspects of Medical Life.*

[To be continued.]

The Demonstratorship of Anatomy at King's College is now vacant. The salary is 100*l.* a year.

Cod-liver Oil.—It is stated in a Scottish paper, that, in consequence of the extraordinary demand of late for this oil for medicinal purposes, its price has risen in the southern markets from 20*l.* to 30*l.* per ton.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

INJURIES TO THE HEAD.

AN apology might be needed for entering upon so exhausted a subject as injuries to the head, were it not that, in modern surgical works, instructions are still given for the liberal application of the trephine, or other instruments for removing portions of bone, in cases where insensibility continues and the breathing becomes stertorous after the employment of active and judicious treatment. The complete abandonment of this operation by Desault, in consequence of its notorious ill-success at the Hôtel-Dieu, and the very general disuse into which it has fallen, both at home and abroad, seem to have failed in eradicating from the minds of authors the affectionate remembrance with which it was once regarded. It is with a feeling akin to horror, mixed with thankfulness that such times are past, that we read of seven or twelve perforations being made with the trepan, in several instances, by Scultetus and Glandorpius. But, what is more, observes Heister, this instrument was applied twenty-seven different times with success (a) upon a Count of Nassau. The perpetuation of this monstrous practice may be in some degree explained by the loose way in which a so-called favourable case was formerly reported, the readiness with which it was received as a precedent, and the general want of accurate *post-mortem* examinations. "I once trepanned," says Sharp, "a young woman about a hundred days (above three months) after she received the blow! The lower part of the parietal and upper part of the temporal bones were fractured and depressed. She had bled at the nose and ears when she first received the injury, and had at times been drowsy and in some little pain, till towards the ninetieth day, when the symptoms of a compressed brain came on stronger, and a short time after, she put herself under my care; *which, with the many instances of the same kind to be met with in authors, show how little safe it is to trust to any extravasation or depression on the brain doing well without the assistance of the trephine.*" (b) What can be more worthless, in a surgical point of view, than such a narration, in which is omitted both the symptoms (if any) which induced Mr. Sharp to perform the operation, and the ultimate result to the unhappy patient.

Let us inquire into the mode of practice of the late Mr. Hey, whose work bears the date 1814. It may be exemplified by the following case:—A son of Mr. C. Topham, aged 14, received a blow on the head from a piece of brick thrown at him. He vomited frequently on the two first days after the accident, and then retained his food. His parents, not apprehensive of the real nature of the injury, did not send for me till the fourth day after the accident. He had then a considerable degree of fever, but was still able to walk about his room, though portions of the brain were lying amongst the hair. (c)

In this instance, some pieces of bone which had wounded the dura mater were removed by means of the instrument known as the Hey's saw, and the patient did well; but we may ask, Why was the operation undertaken at all upon one in whom, from the yet remaining power of locomotion, it was clear that there existed no symptom of compression. Many years ago, I saw an accident of a similar kind, but more severe, in which, had it not been for the decision of the surgeon into whose care the case ultimately fell, the patient's injured cranium would have undergone surgical manipulation. A lad, fourteen years of age, and groom to a gentleman, was violently thrown from a thorough-bred horse upon the hard macadamized carriage-way in London. He was taken up stunned and insensible. There was a lacerated wound of the scalp, comminuted fracture of the vault of the cranium, wound of the dura mater; and portions of the brain having escaped from the interior of the skull, were seen amongst the hair, mixed with clots of blood. The head was shaved; cold lotions were applied; inflammatory symptoms were subdued, as they arose, by active treatment; and the lad recovered, having apparently the perfect use of all his faculties.

It is a truth, that, in St. Bartholomew's Hospital, and, I believe, in most of the other London Hospitals, the cases are rarely, if ever, seen, in which benefit can result from this operation. It can be justifiable only when severe and well-marked symptoms of compression are produced by the depression of a considerable portion of the skull, and even then it may be a question whether the patient has not quite as good a chance, if left to himself. No surgeon in his senses would, in the present day, bore holes in a man's head, for the purpose of sponging away blood effused between the dura mater and the bone. Were he to make as many apertures as the Count of Nassau had the benefit of, he would still be unable to remove the blood which accumulates in these cases about the base of the brain, and which produces the greatest amount of pressure. Mr. Fergusson, the instrument maker to the Hospital, states, that he very rarely furnishes surgeons with trephining instruments for the head. The navy medical regulations, indeed, still require that every surgeon should take with him three, and every assistant-surgeon two, of these cases; but, in the course of events, we may now very fairly hope to see them consigned to the Cabinet of Surgical Curiosities on the ground-floor of the Pathological Museum in the Royal College of Surgeons. I will narrate the particulars of two cases of injuries of the head, in which an examination after death gave the opportunity of estimating how much benefit could have resulted from any operation.

A stout, heavy woman, aged 50, fell upon her head rom a second-floor window, and striking the top of her head against the foot-pavement became insensible. She laboured under the usual symptoms, and died three days after the accident. There was a considerable quantity of dark fluid blood extravasated under the scalp, and a small quantity between the pericranium and the bone. At the coronal suture the frontal and parietal bones were separated, and at the vertex of the head were broken and starred; the fractured bone had wounded the middle meningeal artery, as it lies in the groove of the parietal bone; large clots of dark blood were effused between the bone and the dura mater; along the line of separation of the suture, the dura mater was torn through to an extent of three inches; blood was effused in the sac of the arachnoid; the surface of the brain was soft and disorganised. Upon tracing the line of fracture at the base of the skull, it was seen to pass through the left petrous bone, across the sella turcica to the right petrous bone, where it terminated in the tympanum, which was full of blood, the membrana tympani being entire. On the left side the tympanum was uninjured. The greater quantity of extravasated blood was at the base of the skull, and about the temporal bones, where several of the sinuses were torn.

Patrick K., aged 24, fell from some planks raised about 14 feet from the ground, and, striking his head against some stones, became insensible. In this state he was conveyed to the hospital. The scalp was separated, and raised from the subjacent bone by a considerable extravasation of blood, but no fracture could be detected through the integument, which was not wounded. After a few hours, he opened his eyes, spoke, and got out of bed without assistance, for the purpose of passing water. Towards nightfall he became again insensible; the breathing was stertorous, and the pupils dilated and fixed. Blood was abstracted by venesection and by cupping, but he died about twelve hours after the accident.

Examination of the Body.—After the removal of the blood under the scalp, there was exposed a fracture of the right parietal bone, extending to the anterior inferior angle, where the middle meningeal artery lies; passing across the petrous portion of the temporal bone, it had separated the posterior clinoid processes from the pituitary fossa, and torn the dura mater and sinuses. A large quantity of blood was found in the arachnoid sac at the base of the brain, and in the fossa of the cerebellum. A splinter from the parietal bone had wounded a large vein on the surface of the hemispheres.

An interesting case, showing the great amount of injury from which a patient may recover, if, after the fracture of the

(a) Stalpart. Van der Wiel. Cent. I. Obs. 8.

(b) Sharp on the Operations of Surgery.

(c) Hey's Surgery. 1814.

skull, he escape the perils of systematic surgery, lately occurred in the hospital under the care of Mr. Lloyd.

Jane Anne D., aged 4, was knocked down in the street by a heavily-laden cart going to the docks, and the wheel passing over the head, fractured the skull. She was taken up completely insensible, and carried to the hospital May 11, 1850.

There was a slight wound of the scalp; but the face and head were bruised, discoloured, and swollen. Across the forehead, passing from temple to temple transversely through the frontal bone, could be felt under the scalp, which was entire, the line of a fracture, which readily admitted the point of the little finger, between the separated portions of bone in any part of its course. The child was regarded as in an almost hopeless state; but the head was shaved, cold was applied, and proper remedies were administered to counteract unfavourable symptoms as they arose. On the 17th of May, six days after the accident, she was quite sensible, and could express herself intelligibly. From that time to the present there has been no unpleasant symptom; she runs about as if nothing had happened; but the line of fracture across the forehead can be distinctly felt, and between the fractured edges can be seen the pulsations of the brain, which, even when the child is at rest, are communicated to the integuments of the forehead. Over the right eye is a second line of fracture, which, leaving the first at right angles, passes downwards to the roof of the orbit, and there terminates.

CHIMNEY-SWEEPS' CANCER.

Certain forms of cancerous disease, terminating in ulceration, seem to owe their origin to local sources of irritation. There is in the Museum the preparation of a tongue, through the root of which is a large cancerous hole, commencing in the floor of the mouth and opening upon the dorsum linguæ, close to the rima glottidis. It was taken from an old officer, who for many years was in the habit of smoking a short clay tobacco-pipe, the end of which was thrust under the tongue just where the ulceration commenced. There are, likewise, the hand and fore-arm of a man, aged 49, the surface of which is covered by a warty, vascular, and superficially-ulcerated growth, which bears a close resemblance to an ulcerated cancer of the scrotum in the chimney-sweep. The patient from whom the preparation was taken was employed as a gardener in strewing soot over the ground for several mornings in succession; a warty growth then formed, and it increased and ulcerated in the spring of both the two following years, while he was similarly employed. After this, though he was no longer in contact with soot, the disease increased till it was removed.(a)

On Saturday, Mr. Lawrence removed, from the front of the left ear of a patient, a warty growth, covered by a dry black scab, situated upon the tragus and the adjoining integument. The man, a chimney-sweep, as might have been surmised from his dusky-red complexion, had been, for many years, in the habit of carrying the soot-bag over the left shoulder, and supporting it against the side of the face. The wart, about the size of a bean, was hard and red, and smooth upon the circumference, but, when the scab was removed, there appeared a ragged, soft, and partially disorganised surface, studded with hypertrophied papillæ. The removal of the tumour required the excision of some of the cartilaginous meatus externus, from whence parts of the warty degeneration sprang. The patient, though unconscious of pain, from the administration of chloroform, shrank from the knife as it passed into the structures about the meatus, as if the parts were extremely tender. No unfavourable symptom has supervened, and the patient is going on well.

The microscopical structure of these warty growths is well known: a vascular surface supports a mass of loosely fibrous papillæ, covered by large epithelial cells, which have the power of rapid increase by endogenous formation. In some, a clear round nucleus is distinctly visible; in others, of darker colour, a quantity of granular matter conceals the nucleus from view. The young cells are thin-walled, round, and perfectly transparent; the older cells are of irregular form, elongated, or twisted, darker in colour and less transparent than the former.

(a) Case related by Sir J. Earle in his edition of Potts's Works.

GUY'S HOSPITAL.

By Dr. CHARLES KIDD.

Among the numerous cases in this hospital I will particularise one or two of the most interesting. On Saturday, the 6th instant, the operation for inguinal hernia was performed on a woman, who was brought in with all the usual signs of strangulation. She had worn a truss for eight years; and on being brought to the hospital, the taxis and all the usual means were adopted, without effect. After cutting down on the tumour it was thought best not to open the sac, —the generally recognised practice, I believe, of this hospital; but it was found impossible to return the intestine, a piece of mesentery being also caught in the canal. The sac was then carefully opened, the stricture removed, and the mesentery set free. The intestine was port-wine colour, and at once returned. The woman has since been doing well.

A large mass of

CARIES OF THE FEMUR

was removed on Tuesday by Mr. Hilton. The operation was exceedingly difficult, from the immense extent of bone engaged, the entire lower third being apparently diseased. The man has been in the hospital some three or four weeks, and underwent the operation without chloroform and with much seeming fortitude. The mass, on being examined after the operation, had all the characters of "periosteal" exostosis, with sharp spiculæ running through the caries. It is unnecessary to go through the minute details of an operation so familiar to every practitioner. A piece of bone was removed almost the size of a closed fist, the wound was partially closed, and the man put to bed, having seemingly suffered little.

CHLOROFORM.

The danger attending the use of chloroform has been the subject of no little public anxiety, caused by recent accidents at Guy's, and at another hospital in London. Alexander Scott, aged 34, a police-constable, received an injury of the hand while taking a prisoner into custody. Although the middle finger had been removed before he came to Guy's Hospital, he complained still of great pain. Mr. Cock very properly suggested a second operation. The poor fellow requested to be put under the effects of chloroform, which was effected with some little difficulty; but, no sooner was it done, than the man was dead. The question now more immediately for consideration is, what real amount of danger attends the use of this agent,—so very valuable, and, in such a vast multitude of cases, so successful.

As to its effects on the system, we did not require M. Bouisson to tell us the exact order in which the organic and vital functions become affected by chloroform; —they are evident at a glance. A more practical fact was lately stated in Paris, viz.:—that oxygen is a perfect antidote to these deadly influences,—a point worth recollecting, as bearing the semblance of truth. We have then the astounding fact stated by Gregory, of Edinburgh, that what is sold as chloroform is not chloroform at all: some specimens he examined contained only 1-20th of the true anæsthetic principle! The best test suggested, is agitating the chloroform with sulphuric acid, and afterwards with peroxide of manganese; if it blackens, it is impure. Specific gravity is another test: if not once-and-a-half heavier than water, chloroform is not pure. By keeping, I fear, chloroform does not improve; at least it should be in well-filled and well-stoppered bottles. All specimens, after a little, show unmistakeable signs of hydrochloric acid, and even free chlorine; such are unfit for use. Pure chloroform should have little or no odour; the latter, though so pleasant and fruity, being anything but a recommendation. We are here, then, simply between the Scylla and Charybdis of these chemical perplexities, on the one hand; and the chances of obscure organic disease of the central parts of the nervous system, on the other,—both of which require the utmost circumspection on the part of the surgeon. The chloroform used at Guy's is as pure as any in London, and has been exhibited over and over again without ill effects, so that in the case under notice we ought perhaps to look for something wrong in the spinal and ganglionic systems.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

By Dr. ROBERT TAYLOR.

Physician to the Hospital.

COMPLETE ENTROPIUM WITH TRICHIASIS OF THE UPPER LID OF EACH EYE, AND ENTROPIUM OF THE LEFT LOWER LID,

BOTH CORNEÆ HAZY AND VASCULAR, THE CONJUNCTIVÆ MUCH INFLAMED.

Louisa Aldridge, aged 25, "caught a cold" in her eyes, for which she applied to the family practitioner, who freely cauterised the inside of the lids with nitrate of silver several times. After each application she suffered intense pain, and was unable to open the eyes for several succeeding days. She was under his care for many months, and just before she left he removed a considerable portion of the tarsal cartilage of the right lower lid with all the cilia, and a part of the cartilage of the left lower lid, (a small central bit). Receiving no benefit from this treatment she applied to several medical institutions, in one of which she was made an in-patient. The sum of the treatment which she underwent was the following:—Blisters to the temples, twenty-four in all; a large blister to the nape of the neck, which was kept open for a fortnight, and produced several sloughs, the marks of which are very conspicuous; leeches to the temples, how often she had forgotten; but at one place, where she attended for six months, they were applied every fortnight. Bleeding from the arm, and a seton in the back of the neck. She was admitted as an out-patient of the Central London Ophthalmic Hospital on May 25, 1850, under the care of Mr. Walton, when she was found to be suffering from entropium and trichiasis of both upper lids, and partial entropium of the lower lid of the left eye; both corneæ were entirely nebulous, and covered with blood-vessels, and vision was very imperfect.

On June 2, Mr. Walton performed his operation on both the upper lids, removing the thick portion of the orbicular muscle which lies over the edge of the lid, (to the perverted action of which he attributes the immediate cause of entropium,) and as much of the skin as was sufficient to counteract the bend or curve which the cartilage had acquired; the breadth of the skin did not exceed three lines. The entropium was completely rectified, and the cilia of the right eye were no longer in contact with the globe; but in the left eye a small clump of hairs still rested on the cornea. The patient declined having anything done to the lower lid.

On the 16th, the inverted hairs of the left upper lid were removed in the following manner:—A perpendicular incision was made on each side of their roots, as deep as the cartilage; the upper extremities of these incisions were united by a third in a transverse direction, and the portion of skin, orbicular muscle, and cilia thus isolated were then seized with the forceps, and carefully dissected from the cartilage; the edges of the wound were brought together by a suture. The point of the fore-finger was used during the operation to protect the globe, and render the lid tense, instead of the horn spatula usually recommended.

July 1.—The cilia of each lid are quite free of the globe, the vascularity of the conjunctiva has subsided, and the corneæ have so far recovered their natural condition, as to enable her to resume her employment as a house-servant. There is a slight notch or irregularity perceptible where the cilia were excised from the upper lid.

Mr. Walton said this case showed that the general practice of ophthalmic surgery had not attained that happy state of perfection at which it was supposed by many surgeons to have arrived. What was the original cause of the entropium he could not positively say, but he believed it to have been due to the improper use of the nitrate of silver. It was evident that the entropium alone was keeping up the ophthalmic inflammation. That cause, however, had been overlooked or disregarded; the occasional pulling out of a few cilia being equivalent to doing nothing. In all cases of chronic inflammation or irritation of the eye, even without entropium, the condition of the lashes ought to be carefully looked to, as it was very common for inflammation that is caused by lashes touching the globe to be treated as idiopathic disease. This case had afforded him great satisfaction, and he trusted it would prove instructive to those who had seen it along with him.

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THE MEDICAL TIMES.

SATURDAY, JULY 20.

THE LATE ASSAULT ON THE QUEEN. IMPORTANT MEDICO-LEGAL DECISION IN CASES OF ALLEGED LUNACY.

At the Central Criminal Court on the 11th inst., Robert Pate, formerly Lieutenant in the 10th Hussars, was found guilty, and sentenced to seven years' transportation for striking the person of her Majesty with a stick as she was passing in an open barouche through the gates of Cambridge House into Piccadilly, on her way to Buckingham Palace. The blow was inflicted with a very slight cane, which cut through the wire margin of the Queen's bonnet, and was dealt with such force, that when Sir James Clark visited the royal patient and examined her forehead, he "found a considerable tumour on the outer angle of the right brow, and a small cut which had been bleeding. Her Majesty's bonnet was cut through; the skin was cut not by the wire of the bonnet but by the stick, and Sir James was surprised to see so much injury done by so small a weapon." The defence, which was ably conducted by Mr. Cockburn, rested, as was anticipated, upon the plea of insanity. The outrage upon our gracious Sovereign was committed in the open day, and witnessed by many spectators, therefore the learned counsel did "not attempt to trifle with the understanding of the jury by any endeavour to deny that the prisoner actually committed the act with which he was charged; but he trusted to be able to satisfy the jury that at the time he committed it, he was in such a state of mind as not to render him responsible."

As a matter of Medical Jurisprudence only is the trial now interesting; and, in this point of view, it is one of the most important that has taken place for many years. The evidence in support of Robert Pate's insanity made so strong an impression on the minds of the jury, that they deliberated for nearly four hours before they returned a verdict. For ourselves we must say we think they attached more importance to it than it deserved. It was so unsatisfactory, that the prisoner's own learned Counsel premised that he was "not very sanguine as to the result;" therefore he met the case half-way, by arguing, that "he felt assured the jury would be of opinion, that if the prisoner were responsible at all, he was not responsible to the extent that an ordinary man would be under similar circumstances." This might have been urged in mitigation of sentence, but it supplied no ground for a verdict of not guilty. The man was either sane or insane; he either knew when he committed the outrage that he was doing wrong, or he did not; he was either responsible to the fullest extent, or he was not at all.

If we confine our attention to what transpired on the morning of the outrage, we shall discover nothing in the least degree indicating that he was insane. He left his home as usual; joined the crowd at Cambridge-gate as other people did; watched quietly for the approach of Her Majesty's carriage; and accomplished the attack with great quickness and dexterity. When seized upon the spot, he was perfectly sensible of what he had done; he knew it was Her Majesty whom he had struck; and there was not the least appearance of incoherency either in his manner or his observations. If we take the retrospect of his life, which was furnished during the trial, and ransack the incidents of his personal biography, we must still come to the same conclusion; true, he was eccentric enough, but not more so than other men, were we only able to observe the peculiarities which constantly occur in the solitary and private life of almost every individual. He lamented the death of his dog—we have seen a high-minded and very illustrious Professor shed tears over the death of a noble Newfoundland dog, which was wickedly and spitefully poisoned. He lamented the loss of his horses—we have seen young men at College half maniacal over a much less calamity befalling a favourite hunter. He shouted and sang aloud when he was in his bath—we were not many weeks ago at Brighton, and there heard an eminent Chancery barrister and a celebrated Italian *artist*, in the swimming bath, shouting and fighting with the watery element as if they were stark mad. He put whiskey and camphor into the water in which he bathed—an old woman's remedy, which many sensible persons adopt at different watering places, particularly in the north. He bought some nursery rhymes and read them through—very lately we met a learned friend of ours, who had bought, for sixpence, a copy of Æsop's Fables, and was reading them with great delight. He walked about the streets in a hurried manner, switching his cane to and fro, and we are told looked wild—perhaps so, but he took care never to be run over or to meet with any other accident. He ordered a cab-driver to come to his door daily at a given hour, and drive him over to Putney Heath, where he walked for about ten minutes among the furze—how many hundreds daily take a far more monotonous drive in Hyde-park? Lastly, he had a dyspeptic attack, and talked about having bricks and stones in his stomach—but there is no evidence to show that these substantive expressions were meant to convey more than a description of the uneasy sensations he endured. Where, then, is the evidence of this Robert Pate's insanity? He discharged his duties in his regiment "to the satisfaction of his superior officers, and was esteemed by them and everybody in the regiment." At his lodgings his conduct was exemplary—"he paid his accounts very regularly, put them away, and kept the receipts;" but notwithstanding all this, Dr. Conolly, declares his opinion that this man was of unsound mind. "I form this opinion," he observes, "from the conversations I myself have had with him, and from all the other facts I have heard, but principally from the former. *It seemed to me that he has a very small share of mental power, without object or ambition, and unfit for all the ordinary duties of life. In conversation he would undoubtedly know the distinction between a right and a wrong action, but I should say that he would be subject to sudden impulses of passion.*" We cannot conceive more inconclusive reasoning. Does it follow that because a man has a "small share of mental power," and is without "object or ambition," that therefore he is not amenable for his actions to the laws of society? The opinion of Dr. Conolly, that he was "unfit for all the ordinary duties of life," is directly at variance with the evidence to which we have referred. Dr. Conolly admits, that "in conversation he would undoubtedly know the distinction between a right and a wrong action." Why then should his conduct not have been governed by his perception of right and wrong, since it is admitted there was no lesion of this intellectual faculty? "But I should say," adds Dr. Conolly, "that he would be subject to sudden impulses of passion." So are men of evil disposition and bad moral habits; but surely this unhappy mental condition ought not to be allowed as an extenuation of crime. Dr. Munro states, that he had examined the prisoner five times since his committal, and was of opinion that he was of unsound mind; but his reasons for coming to that conclusion do not appear to have been elicited upon cross-examination. We have great respect for the professional attainments of Dr. Conolly and Dr. Munro, and we concede to them great knowledge and tact in the management of lunatics; but to suppose that because certain gentlemen devote their attention to the treatment of the insane, and take charge of lunatic asylums, that they therefore enjoy any peculiar or occult insight into the secret workings, or, it may be, the aberrations of the human mind, is a manifest fallacy. To send for a physician, under such circumstances as the above, to "examine," as it is called, "into the mind of the prisoner," is to call upon him, as if he were a psychological engineer, and the intellectual and moral faculties and motives of human action as palpable objects for his inspection, as the wheels, levers, pulleys, and screws of a steam-engine. The mysteries of the human mind are not patent to these specialists any more than to any other branch of the profession. There is no art nor mystery in detecting the presence of insanity when its signs are appreciable; but these "mad doctors," as Lord Brougham terms them, are apt to adopt very vague and unsatisfactory notions; and almost always—as in the recent case of Nottidge *versus* Ripley—appear to disadvantage in a Court of Justice. We highly disapprove and indignantly protest against the tone assumed by Baron Alderson towards Dr. Monro, and to the profession of which he is so distinguished a member; nevertheless, it is to be hoped that the interpretation of the law which was laid down upon this occasion, will do much to dispel the misunderstanding which has continued to prevail among medical men respecting the plea of insanity in criminal cases, and that, too, in spite of the explanation given by previous Judges.

The rule was clearly enough laid down by Lord Hale, that, in order to make out the plea of insanity, a man must be proved not to have been aware of what he was doing, and incapable of distinguishing right from wrong when he committed any act charged against him. In 1843, the fifteen Judges, who adjudicated upon some questions submitted to them in the case of M'Naughten, confirmed this rule, and decided that, "before a plea of insanity should be allowed, undoubted evidence ought to be adduced, that the accused was of diseased mind, and that, at the time he committed the act he was not capable of distinguishing right from wrong." Here, be it observed, two points were involved, the diseased mind antecedent to the commission of the act, and the unconsciousness of right and wrong at the moment of its perpetration. The first point has too often been brought into undue prominence, while the second has been lost sight of. No sooner has a man been charged with a heinous offence than all the incidents of his life have been raked up, in order to discover some evidence of a previously existing state of mental aberration. It was argued that, if mental disease could only be proved to have

once existed, it might recur, and thus account for any sudden impulse or mad action, without the necessity of proving actual insanity at the time of, and with reference to, the particular act. The learned Judge has, by his interpretation of the law in the present case, strengthened the phalanx of judicial decisions which ought sooner to have put an end to this specious sophistry. A man, he tells us, may be insane on some points—nay, his mind may be diseased—but he is, nevertheless, punishable for offences. The learned Judge told the Jury that—

"He would not waste their time by going through the evidence for the prosecution, because it was admitted that the prisoner had committed the act, and that, if he was a man of sound mind and understanding he was responsible; and whether he was so or not was the only question they had to decide. It was clear that at the present time the prisoner was perfectly sane—they began with that fact, and the law threw upon the prisoner the onus of proving that he was in a different state at the time the offence was committed, and the jury would say whether that had been done after he had explained to them what was his opinion of the law upon the subject. In the first place, they must clearly understand, that it was not because a man was insane that he was unpunishable, and he must say, that upon this point there was generally a very grievous delusion in the minds of medical men. The only insanity which excused a man for his acts was that species of delusion which conduced to and drove a man to commit the act alleged against him. If, for instance, a man being under the delusion that another man would kill him, killed that man, as he supposed, for his own protection, he would be unpunishable for such an act, because it would appear that the act was done under the delusion that he could not protect himself in any other manner, and there the particular description of insanity conduced to the offence. *But, on the other hand, if a man had the delusion that his head was made of glass, that would be no excuse for his killing a man. He would know very well that, although his head was made of glass, that was no reason why he should kill another man, and that it was a wrong act, and he would be properly subjected to punishment for that act.* These were the principles which ought to govern the decision of juries in such cases. They ought to have proof of a formed disease of the mind—a disease existing before the act was committed, and which made the person accused incapable of knowing at the time he did the act that it was a wrong act for him to do. This was the rule he should direct them to be governed by. Let them try it by this test. Did this unfortunate gentleman know it was wrong to strike the Queen on the forehead? Now, there was no doubt that he was very eccentric in his conduct; but did that eccentricity disable him to judge whether it was right or wrong to strike the Queen? Was eccentricity to excuse a man for any crime he might afterwards commit? It was true, that, after the prisoner had committed a breach of military discipline by going away from his regiment without leave, he had been excused on account of his supposed weak state of mind; but that was no criterion for the jury, and they must adhere to the law in its strictness. The prisoner was proved to have been perfectly well aware what he had done immediately afterwards, and in the interview which he had had since with one of the medical gentlemen he admitted that he knew perfectly well what he had done, and ascribed his conduct to some momentary uncontrollable impulse. *The law did not acknowledge such an impulse if the person was aware that it was a wrong act he was about to commit, and he was answerable for the consequences. A man might say that he picked a pocket from some uncontrollable impulse, and in that case the law would have an uncontrollable impulse to punish him for it.* What evidence was there, then, in the case to justify them in coming to the conclusion, that when the prisoner struck the Queen, he did not know it was a wrong act—in fact, that what he was doing was wrong? The learned judge then read over the whole of the evidence for the defence, commenting upon it as he proceeded. He went on to say, that the prisoner was an object of commiseration was quite clear; and that he should also have been taken better care of, was equally true; but the question they had here to decide was, were they satisfied that he was suffering from a disease of the mind which rendered him incapable of judging whether the act he committed towards the Queen was a right or a wrong act for him to do? If they were not satisfied of this fact, they must say that he was guilty; but, on the contrary, if they thought he was not aware what he was about, or not capable of distinguishing between right and wrong, they would then say that he was not guilty on the ground of insanity.

"The jury retired at twenty minutes past three, and did not return into court until five minutes past seven, when they gave a verdict of GUILTY."

We have given the learned Judge's charge to the jury nearly at length, with the verdict annexed, because we conceive that this is a case of great importance in medical jurisprudence, and will do much to correct the misunderstanding that has prevailed upon this subject.

THE APOTHECARIES' COMPANY.

To believe, after past experience, that the existing corporations will consent to the establishment of a new college, in title equaling, and in function superseding, their own,—that a minister will be found bold enough to throw aside all regard for the opinion of those to whom, in matters medical, he has been accustomed to bow, would be indeed the *ne plus ultra* of credulity.

The minister says, "Agree among yourselves and I will carry out your wishes, but I will never *compel* any college to resign the powers it possesses, or promote the establishment of a new college in opposition to those now in being."

The College of Surgeons refuse to be a consenting party to the establishment of any institution, the examiners of which are to test the qualifications of practitioners in surgery. The College of Physicians are equally tenacious of their privileges; thus, then, an insurmountable bar is raised to all progress. Supposing the College of Surgeons to be endowed with the most liberal constitution, we feel confident the surgeons of England would still wish it to remain the College of Surgeons. And equally confident are we that the profession at large would oppose any attempt to convert the College of Physicians into a College of General Practitioners in medicine, surgery, and midwifery.

The existence of a third Institution is absolutely required. To the formation of a new College insurmountable difficulties exist. Can the Apothecaries' Society be remodelled in such a way as to advance the interests of the many, and not to interfere with the wishes of the few? If so, a reformation of the Apothecaries' Society appears to be within our reach. In accomplishing this, no existing privileges need be taken away without fair compensation; while by such a reformation many grievances may be removed. All that could be desired will not be effected, but something will be really gained, —one step in advance be positively made. An Englishman is eminently practical. It is rarely that he grasps at the shadow and drops the bone. To the exertions of the Apothecaries' Society the general practitioner owes his present standing. The curricula and stringent examinations they have enforced, render the real value of their license little inferior to that of any British Medical Corporation.

They have now addressed a letter to Sir George Grey, —published in another part of our Journal,—containing suggestions calculated still further to advance the status of the great body of the medical profession.

In considering their scheme for self-reformation, we entreat the profession to look at the whole question calmly and *practically*. A new Institution to embrace all—to examine in everything—with the most liberal political constitution—is indeed a thing to be dreamed of—to be desired, but impossible at the present moment to be attained.

Some of the suggestions contained in the letter of the Master and Wardens we shall briefly consider.

It is proposed that the apprenticeship clause should be annulled; and that a register should be kept of all those licensed to practise by the Society. Of the wisdom of these changes no doubt can be entertained.

The inability of the Society to appoint as examiners any but their own members has frequently compelled them to place on that Board, men whose scientific status was far too low to secure the respect of the student, or the confidence of the profession. They now suggest that every Licentiate of ten years' standing shall be eligible for an examinership. This is a decided improvement. Among members and licentiates may be found men who are every way fitted to fill the responsible duties of an examiner, and, by the lustre of their names, to add dignity to the Society.

Their proposal to divide the pass-examination into two or more divisions, conducted at lengthened intervals, cannot fail to secure greater exertion, on the part of the indolent, by enforcing more extensive acquaintance with the collateral sciences, and to afford considerable relief to the diligent, by relieving them from the burden of remembering the atomic constitution of morphia, and the class and order of oppoponax, while engaged in the wards and dead-house of the hospital in acquiring a practical knowledge of disease; for we cannot suppose that, under a reformed government, the Society will *compel* the student to acquire a knowledge of botany, and only *recommend* morbid anatomy to his consideration.

The proposal to admit all graduates of British Universities, and all members of Scotch and Irish Colleges, on the payment of a small fee, to the privileges of licentiates by examination, is indeed liberal; but if made law it appears to us doubtful whether there would be any new licentiates by examination of the Apothecaries' Society to register. For who, so long as he could obtain without difficulty the degree of doctor in medicine, and at the same time equal privileges with the licentiate by examination, would willingly submit to a more severe ordeal, and be branded for life with the odious appellation of apothecary? If the suggestion of the Worshipful Society should be acted on, England would soon present the insufferable anomaly of an apothecaries' society supported by the contributions of Scotch graduates — of a paid board of examiners, with nobody to examine.

But this is a question which deeply involves the interests, not only of the Society of Apothecaries, but those also of the whole body of English teachers. What man would *study* in England, when, after less mental labour, and at a lower pecuniary cost, he might, by one examination *before his own teachers*, obtain a degree, and all the rights and privileges of an English surgeon and apothecary?

Before the Society are allowed to obtain this part of their request, the University of Edinburgh must relinquish, as Mr. Syme some little while since told us it was willing to do, the right to license; and be content, as every university ought to be, with the privilege of conferring degrees. It must be constantly borne in mind that the examiners in the Universities of Scotland are the teachers in those universities—the only recognized teachers.

Let the present holders of British degrees be admitted *ad eundem*. But as a prospective law this proposal of the Apothecaries' Society will meet with decided opposition; and we believe every teacher in the metropolis will aid us in endeavouring to prevent so gross an act of injustice being committed under the plea of liberality. Our readers will do well to read an able pamphlet on this subject published in 1845 by the present distinguished Professor of Clinical Surgery in University College.

MEDICAL REFORM.

We have been favoured with a copy of the Report adopted, with but one dissentient, by the South-Eastern Branch of the Provincial Medical and Surgical Association, at an annual meeting held at Reigate, on Wednesday the 10th instant. We regret that we have not space to spare for the insertion of the entire document.

The report states, that the "General Practitioners must come to the conclusion of the utter *impossibility* of rendering the College of Surgeons what has been appropriately and emphatically termed their 'head and home;' and it therefore recommends, 'as of pre-eminent importance and desirableness,' the incorporation of the General Practitioners in an independent college; which, to the credit of the Council of 'the National Institute of Practitioners in Medicine, Surgery, and Midwifery,' has been advocated by them with the greatest truth and clearness of argument, a steady perseverance, a calm dignity, and an incomparable temper, for a long course of time," &c.

After this compliment to the National Institute, the Report censures the Editors of the *Provincial Journal*, who, it states, have "not written their leaders, referring to the question of medical reform, with that *candour and fairness* which the numerous readers of the association who differ from them had a right to expect."

This is a rebuff our editorial brethren little expected, and they have consequently, in a recent number, answered the allegation of the Surrey reformers, by declaring their determination to resign their offices at the next anniversary meeting at Hull. It is clear that the Provincial Association, in meddling with political questions, has mistaken its mission, and that it is now on the brink of an abyss from which it will require all the tact, dexterity, and prudence of the Central Council to retrograde with credit.

These internal commotions are indicative of a speedy ruin; for "a house divided against itself cannot stand." This is the fault of the Central Council. We have often warned them of the impolicy of yoking themselves to the question of medical reform; and we have repeatedly pointed out the inconsistency of their conduct, as the Society was originally formed for entirely different objects; but they have disregarded these warnings, and only noticed our reproaches to complain of their severity. Since, however, the members have taken the matter into their own hands, we may venture to predict that one of two things will speedily ensue—repentance or dissolution!

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Profession are well aware that of late very great dissatisfaction has been expressed regarding the proceedings of the Council of the Royal Medical and Chirurgical Society. Such unmistakable hints, as the repeated reception of their recommendations by an insignificant majority, we hoped would have had their due effect; and it was with great surprise that, on Thursday last, we found the Fellows especially convened to vote, on the recommendation of the executive, no less a sum than 2000*l.*—the whole of the funded property amounting to no more than 2700*l.*—*to repair the house and improve the Hall!*

Dr. Webster—to whom the profession owe most important reforms, both in Bethlem Hospital and the Royal Society—very temperately pointed out how injudicious it would be to expend 1000*l.* (the sum asked for improving the Hall only) on a room which had cost but 800*l.* He very forcibly reminded the meeting, that the number of new Fellows admitted during the session had been considerably less than half the average number of former years; and that, from this cause alone, the year's income had shown a deficit of 119*l.* 14s. He readily acknowledged that the Hall required repairs, that the ventilation was exeessively bad, and the aconstic arrangements very defective; but still he insisted that from the architect's own showing, even after 1000*l.* had been expended, these defects would be little, if at all remedied.

The feeling of the Society was evidently with Dr. Webster. The meeting was adjourned *sine die;* and there can be no doubt that the recommendation of the Council will be rejected, and a smaller sum voted for necessary cleansing, additional furniture, and the substitution of wax-candles for gas-lights—a far better plan than to deprive the Society of four-fifths of its funded property, without the slightest prospect of adding to its status, increasing the comfort and pleasantness of its meetings, or inducing new Fellows to join its ranks. Our readers, we are sure, will think the Council have been very remiss in disregarding these important points, and be the more inclined to agree with us, since both Mr. Arnott and Mr. Phillips, the Society's trustee and treasurer, dissent from such lavish and undue expenditure.

For ourselves we see no reason why the large and handsome rooms the society have lately acquired on the first floor of the house should not be converted, as they easily and inexpensively might, into a Hall for meeting; that the present Hall should form a Club-room; and the Council-chamber, when not occupied by that, we fear, almost incorrigible body, be provided with pens, ink, and paper, and converted into an apartment where those who wish to write or read may find a quiet and a silent resting-place. Better attract new members than spend money not easily re-amassed; better hold out the hand of fellowship to kindred societies, than talk of "ornamental repairs;" better throw open rooms for purposes of kindliness and good fellowship, than construct an unsightly and ungainly gallery—for such would be the result of the proposed "improvement;" and better, far better, buy books, and provide the current literature of the day, than fee an ambitious architect to devise a gaudy and inappropriate Hall.

THE CHOLERA.

It is with much regret we have to announce, that three cases of decided Asiatic cholera have been admitted into St. Bartholomew's Hospital. Hence, the hopes which the Registrar-General holds out in his last Report, that the deaths there recorded are not attributable to that form of the epidemic, must now give place to serious apprehension, that another visitation may be awaiting us, though doubtless in not so virulent a form as that experienced in 1849. Many weeks ago we predicted this; and asked, as we do again:—What has been done by the authorities in the removal of fatal influences since the last outbreak?

The busts of the late Professor Cooper and of Mr. Arnott, by Mr. T. Butler, are nearly completed.

Baths and Washhouses.—The Belgian Government are about to establish baths and washhouses on the model of those in this country.

THE LATE DUKE OF CAMBRIDGE.

The sad events which have made this month memorable, and thrown the nation into heartfelt mourning, forcibly illustrate the truth of the remark of the Roman poet:—

> "Pallida mors æquo pulsat pede pauperum tabernas,
> Regumque turres."

In one short week Great Britain has been deprived of her greatest statesman, and of a Prince not less illustrious for kindness of heart than exalted rank. The particulars of the death of Sir Robert Peel appeared in our last Number; we are now enabled, on the best authority, to place before our readers the chief circumstances attendant on the last illness of the Duke of Cambridge.

Few men enjoyed more excellent health during a long life than His Royal Highness, and, with the exception of occasional attacks of gout, his health continued good until he was stricken with the malady which carried him off; still, it had been apparent to his family for some time, that his strength was not equal to the excitement of public meetings, and of late he had frequently returned home after such occasions, exclaiming that he was "dead beat;" but a strong sense of duty urged him to continue his exertions contrary to his better judgment and the entreaties of others.

On Sunday, the 9th of June, he went to Kew to hear a charity sermon. The Bishop of Manchester was present on the occasion, and preached in behalf of the Kew Charity-schools. The Duke, ever anxious to show attention, insisted, after the sermon, on accompanying the Bishop over Kew Gardens and grounds. It was his intention to have invited him to Cambridge Cottage, but it happened that, in consequence of the dry rot having attacked the house, the flooring of the hall had been taken up, and the mansion was not in a state for the reception of visiters. The clergyman of the parish, the Rev. Mr. Byam, knowing this, requested the Duke and the Right Reverend Prelate to take refreshment at his house. His Royal Highness was not in the habit of eating luncheon, but, ever considerate to others, he accepted the invitation. He then went to Mortlake and attended afternoon service. From thence he drove to St. Catherine's Lodge, and called on Lady Taylor, the widow of Sir Herbert Taylor, his late brother's esteemed friend and former equerry. He then walked in the Botanical-gardens, Regent's-park, and returned home to dinner in a state of considerable exhaustion. During the evening it was remarked that he appeared heavy and listless, but he made no complaint of indisposition. The first symptom that showed itself was a violent rigor about the middle of the night, so severe that his teeth chattered, and his whole frame shook; this passed away, but it was some time before he recovered warmth. He felt unwell the next morning, but continued to drive out as usual for several days; at length, increasing indisposition compelled him to yield.

The malady under which His Royal Highness laboured was low fever, accompanied with much prostration of strength and exhaustion of nervous energy; and it may well be supposed that, having entered his seventy-seventh year, his power of rallying was but small. No particular organ was especially affected, and hopes were at times entertained of his recovery; but, during the last week, his strength was supported mainly by stimulants. It is well known that, in advanced age, a break up of the constitution is often rapid, and that men of large frame, and who have enjoyed vigorous health, are often those most speedily carried off; exhaustion is rapid, fainting easily induced, and, under such circumstances, the heart will stop, to beat no more.

The Duke had passed a very bad night, but seemed progressing favourably on Monday the 8th inst. As evening drew on he conversed occasionally with the Duchess, and inquired, with some interest, who had called during the day, and if his dear son had dined with her, &c., &c. About half-past nine the Duchess of Cambridge was summoned from the room; but scarcely a minute had elapsed, when one of the pages followed hastily, and made a sign to Her Royal Highness to come back immediately. She hurried to the bedside of her husband, and was just in time to see him draw his last breath!

Though a general account of the last moments of illustrious personages may be given with propriety, we do not think it decorous to draw aside the veil which consecrates the chamber of the dying, and have therefore abstained from entering into particulars which could only gratify a

morbid curiosity. Suffice it that the Duke died as he had lived, a Christian in practice not less than in name.

During his illness he showed the kindest consideration for others, making frequent inquiries for his friends, especially such as were ill, but he made no querulous complaints about himself. It was not thought prudent to communicate to him the death of Sir Robert Peel, nor the assault upon Her Majesty, for he was not in a condition to bear excitement. This consideration for others when he himself was so ill, was but a type of his whole life; he never could, and never did, turn a deaf ear to a tale of sorrow or an appeal for charity. Many a tear has been seen to roll down his cheeks after an affecting detail of misfortunes, and with a convulsive sob he would inquire: "Can nothing be done? Is there no means of affording help? We must try what we can do."

The frequency of the Duke's appearance at public dinners was made a subject of animadversion in some periodicals; but when indulging in jokes at his expense, they little knew how irksome and even painful of late years were these claims upon his charity; indeed, nothing short of a strong sense of duty, combined with great benevolence of heart, could have carried him through such sacrifices of convenience and comfort as he made on these occasions; and a little reflection will show how they arose. The Duke of York, the Duke of Kent, the Duke of Clarence, the Duke of Sussex, and the Duke of Gloucester, each made a point of patronising certain charities; and it is needless to say how much importance is attached to royal patronage by public institutions, or what efforts are made to obtain this boon. The Duke of Cambridge, being the sole survivor of the royal brothers residing in England, regarded these charities as heir-looms which had descended to him, and looked upon them as a sacred trust confided to his care. Prince George was too young to afford him much assistance, and the position of the Prince Consort precluded an appeal to him; therefore, the whole onus of taking the chair at public meetings, and dinners for charitable purposes, devolved upon the Duke; and how he discharged this trust is too well known to need any comment. But, now that he is no more, it must excite a feeling of regret in the minds of those who had often made him the object of their satire, that motives so pure and disinterested, and habits naturally so retiring, should have been so misrepresented. A circular letter, issued by the Duke in favour of the Lock Hospital, was made the subject of much unfriendly comment; but the Duke himself told our informant, that 3,000*l.* were added to the funds of the charity by this means. The hospitalities of Cambridge-house and Kew were on the most liberal scale; but the public heard little of these banquets, as they were never paraded in the fashionable journals. Constant guests at his table were some old officers, whose state of health made them seek retirement from society; but their isolation only made them more welcome to Cambridge House; there a kindly grasp of the hand and cordial greeting were never wanting. A little incident will sometimes speak volumes, and the following, for which we can vouch, is full of meaning. Her Royal Highness the Duchess of Gloucester was a frequent guest, and the Duke would make up little parties of congenial minds to meet her at her brother's table. When Her Royal Highness drove into the Court-yard, instead of allowing the equerry in waiting to receive her, such was the affectionate solicitude and chivalrous feeling of the Duke, that he would hurry to the door to meet his sister himself, and at her departure would put on her shawl and cloak, and conduct her to her carriage, however cold or inclement the night might be.

But a few weeks have elapsed since the writer was present at a public dinner for the benefit of St. Mary's Hospital, at which the Duke presided. It so happened, at the eleventh hour, that it was discovered, on the day appointed for the dinner, Her Majesty's birthday was to be celebrated. This caused great consternation, for it was apprehended that the Duke of Cambridge would not be able to attend. A communication was made to His Royal Highness, and, on its being explained to him that his absence from the dinner would probably be injurious to the interests of the charity, he at once announced his intention of being present. Right well did he perform his duties, and right earnestly did he plead in behalf of the hospital, remarking, that "he well knew the importance of such charities; that he was always warmly interested in their success, and that, as he could not expect to live many years longer, it was his earnest hope that his son would follow in his steps and support them after he was gone." A few days afterwards the Duke presided at a meeting of the weekly board of the hospital, and it was announced that Thomas Thistlethwayte, Esq., had given to the charity the princely donation of 900*l.* It was suggested that the Duke might, perhaps, write an autograph letter of thanks. "Oh, surely, surely, (said His Royal Highness,) with the greatest pleasure,—I'll do it the first thing after I get home,"—and it *was* done thus promptly. This readiness to oblige, and solicitude for the welfare of the poor, mingled with the kindest condescension, were among his most striking characteristics.

The Duke of Cambridge is erroneously reported to have died very rich, and rumour has even gone the length of naming the sum left by him at several hundred thousand pounds; the fact is far otherwise. The Duke was Governor-General and Viceroy of Hanover from 1813 to 1837, and it has been supposed that during this period he laid aside large sums. The income allowed him to keep up the state and dignity of royalty, was 50,000 Prussian dollars, about 10,000*l.*, a sum quite insufficient for the purpose, when it is borne in mind, that not only was there a large court and princely table to be maintained, but extensive charities to be supported. These heavy expenses absorbed nearly the whole of his income, public and private, and what little remained was devoted to the pensions, salaries, and charities, continued in England during the whole time. Although generous to lavishness, the Duke maintained the greatest order in his affairs, and never allowed a tradesman's account to stand over beyond three months; it redounds not a little to his credit that he died without a debt—the only one of the English princes of whom this can be said.

The amount of money left by his Royal Highness falls short of 90,000*l.*, and this is equally divided between Prince George, the Princess Augusta, (Hereditary Grand Duchess of Mecklenburg Strelitz), and the Princess Mary. The princesses receive their portion intact, but all the income derivable from Prince George's share, including part of the rental of Combe Wood, (an estate in Surrey, bought by the Duke for 54,000*l.*), about 1,500*l.* per annum, will be required, for some years to come, to liquidate the pensions bequeathed by the Duke.

Cambridge House is left to the Duchess, when the lease falls in, which will be in about five years. Between 30,000*l.* and 40,000*l.* have been expended upon it.

The above facts may be relied on as authentic, and we have been thus particular in order that justice may be rendered to a Prince so illustrious, so generous, and so charitable, whose liberality to medical and numberless other charities, has never been exceeded—a liberality flowing from unbounded kindness of heart, which was scarcely appreciated during the lifetime of the illustrious subject of this memoir.

The following anecdote has painful interest:—

The Duke and Duchess of Norfolk had issued invitations at a distant date for a state dinner-party, on July 8, to meet the Duke and Duchess of Cambridge. Amongst the guests who *had accepted*, were Sir Robert Peel and Viscount Cantilupe: at twenty minutes to ten on that evening the Duke of Cambridge breathed his last, and Sir Robert Peel and Viscount Cantilupe had been already numbered among the dead.

It was not considered necessary to perform any *post-mortem* examination, nor was there any attempt at embalming; the latter, indeed, would not have been practicable, for it was found necessary to close up the coffin on the second day.

The simplicity of taste, which formed a marked feature in the character of the Duke, led him to direct that his remains should be interred in the parish church of Kew, close to the cottage which for so many years had been his favourite residence.

Thus died the Duke of Cambridge, full of years and honours; but no honours in the gift of man, nor distinctions of his creation, can shed so much lustre on a name as noble qualities implanted in the heart. In all the domestic relations of life he was a model; as a husband, most tender and devoted; as a father, of love unbounded, tempered by good sense; a true-hearted and considerate friend. His memory will be enshrined in the hearts of those who knew him well, and his reputation will rest on that noblest of all foundations—his deeds of Christian charity.

THE APOTHECARIES' COMPANY.

TO THE RIGHT HONOURABLE SIR G. GREY, HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT.

Apothecaries'-hall June 26.

SIR,—Referring to the memorial which I had the honour of laying before you on behalf of the Society of Apothecaries on the 4th ult., I am now desired by my colleagues to submit for your consideration the following suggestions for an amendment of the Apothecaries' Act in several particulars, in which a change in the existing law would, in the opinion of the Society, be attended with beneficial results, not only as regards the class of practitioners in this country whose education and examination the act more immediately regulates, but also other classes of practitioners, who, not having pursued the course of study, or submitted to the examination prescribed by the Act, may still be desirous of practising as apothecaries in England or Wales.

Before proceeding, however, to state the alterations which the Society's experience leads them to suggest in the Act of 1815, I have been requested to notice one or two objections which have been urged to the Society of Apothecaries being intrusted with the superintendence of the education and examination of that class of medical practitioners.

The Society of Apothecaries, it is well known, is one of the municipal corporations of the City of London; and it is objected that it is unbecoming that the important functions which devolve upon the society should be administered by a city guild. It is further objected that the Society of Apothecaries is a trading body, and is on that ground unfit to be intrusted with the performance of duties confessedly of a scientific character. And a further ground of objection to the Society is the name under which the holder of its certificate of qualification acquires the right of engaging in medical practice—namely, that of the "Apothecary."

As regards the first of these objections, it is to be observed that the Society of Apothecaries, which was then, as now, one of the municipal corporations of the City of London, was in the year 1815 selected by the Legislature, with the acquiescence of the Royal College of Physicians and Surgeons, as a fit and proper body to be intrusted with the administration of the act in question, the Government having refused to constitute a fourth body for the purpose. That the selection of an existing municipal corporation for the discharge of such duties as the act contemplated (whether wise or unwise) was certainly in accordance with established precedent, both in this country and elsewhere. The Surgeons' Company of London, which had been intrusted with duties in connexion with the science of surgery analogous to those confided to the Society of Apothecaries, in connexion with the science of medicine, although separated from the Barbers in 1745 (more than a century and a quarter after the separation of the Apothecaries from the Grocers,) was constituted a distinct city company, and so continued till the beginning of the present century, when an accidental dissolution of the company, by the sudden death of the master, on the day of election, led to the re-incorporation of the members of the old company under the name of "The Royal College of Surgeons in London," and its connexion with the corporation of London then ceased. The Royal College of Surgeons of Edinburgh also, "as the Surgeons', or Chirurgeons' Craft," until within the last few days, formed one of the fourteen incorporated trades of the city of Edinburgh; and a Bill introduced into Parliament in the present session has just received the Royal assent,—one of the objects of which is, to dissever the connexion existing between the college and the incorporated trades and municipal corporation of the city of Edinburgh.

With respect to the objection that the Society of Apothecaries is a trading body much misapprehension exists. The Society, in its corporate capacity, is not a trading body, nor are the individual members of which the Society is composed united in the prosecution of a joint trading. No portion of the funds or property of the corporate body is embarked in trade; and no individual member of the corporation, in his character of a member of the corporation, is, or can be benefited, directly or indirectly, by the operations which are carried on at Apothecaries'-hall. The facts are these:—Within a few years after the incorporation of the Society, certain of its members, finding great difficulty in purchasing unadulterated drugs in the market, formed a plan for supporting a dispensary of their own at Apothecaries'-hall. This was followed, in 1676, by the formation, by subscription, of a chemical laboratory, for the purpose of supplying the subscribers with such chemical preparations as they might require in their medical practice as apothecaries; and it appears that the supply was accordingly, for some years, confined to the subscribers and to the other members of the Society. This restriction, however, was afterwards removed, and the public were permitted to purchase such preparations as they might require. In progress of time the undertaking extended itself; and, at the present day, the Navy, the East India Company, and numerous public institutions derive their supply of drugs and chemical preparations from the laboratories at Apothecaries'-hall. The capital, however, with which this undertaking is carried on is provided by a limited number of individual members of the Society, who are in fact associated together in partnership (undoubtedly under the partial control of the corporate body;) but the number of such partners is considerably less than the number of the members of the Society at large; and the profits arising from the undertaking are of course divided among the individuals composing the partnership, and not among the members of the Society generally.

The real answer, therefore, to the objection is, that the Society is not, as a public body, engaged in trading operations, nor are the individual members of the Society, whose capital is embarked in the undertaking I have described, traders in the sense of men who devote their personal time and energies to the prosecution of a trade; but they are individuals who, being themselves engaged in the practice of the medical profession, are at the same time promoting, through the agency of competent officers, an undertaking which has for its object the production and supply of the various remedial agents of which the medical practitioner avails himself in his treatment of disease.

An objection is occasionally urged to the name of "apocary," as designating rather a compounder of medicines than a medical practitioner qualified to treat disease. The Society have no particular partiality for the name if a better can be found; but they feel that there are advantages in adhering to an old name, which ought not to be lightly abandoned. The functions of the English apothecary as a medical practitioner are now clearly and distinctly ascertained. Successive Acts of the Legislature, followed by a course of judicial decisions, have determined his *status* in the medical profession, and established his legal claim to fitting remuneration for his professional services. The law forbidding the practice of an apothecary by unqualified persons, though long difficult of execution, from the cumbrous machinery by which it was put in motion, can now be expeditiously and economically enforced through the comparatively simple process of the County Court; and, more than all, the apothecary of the present day (whatever may have been the claims to medical skill of the apothecary in earlier times) is recognised as a well-educated medical practitioner, thoroughly competent to the discharge of the duties which devolve upon him, and who has given satisfactory evidence of such competency before entering upon practice. There seems little temptation, therefore, to change an ancient name, which has, happily, become identified with an honourable and scientific calling.

I now proceed to state the alterations in the Act of 1815, which the Society of Apothecaries respectfully suggest for your consideration.

The Act requires that the members of the Court of Examiners should be elected from members of the Society of not less than ten years' standing. The Society propose, that in future all licentiates of the Society of ten years' standing (whether members of the Society or not) shall be eligible for seats in the Court of Examiners, and that not less than one-half of the members of the Court shall be licentiates who are not members of the Society.

The Society proposes that power should be given to the Court of Examiners to divide the examination for their certificate into one or more examinations at proper intervals, with a view to relieve the student from the inconvenience of being subjected to an examination in all the branches of study on which he has been engaged on one and the same occasion.

At present the fee paid for a certificate of qualification for practice in London is ten guineas, and for practice in the country six guineas. The Society proposes that the fee should be equalized for the whole kingdom.

The Court of Examiners are at present required to hold

their meetings at Apothecaries'-hall. The Society suggests that this restriction should be removed, and that the Court should be authorised to sit in any building which may be provided for them, not being beyond a limited distance from the General Post Office.

No person is admissible for examination under the present Act who has not served an apprenticeship of five years to an apothecary. The Society proposes that the service of an apprenticeship shall be no longer compulsory on the student.

The Society proposes that there should be a registration of all persons admitted to practise as apothecaries after examination by the Court of Examiners.

That all persons holding a degree in medicine granted by any British University, and all members of Scotch or Irish Colleges which are authorised by law to grant a license or certificate of qualification to practise in medicine after examination, such license or certificate conferring the right to practise medicine in those countries, should be admitted to registration without further examination on payment of a small registration fee.

That all surgeons and assistant-surgeons in the army, navy, and East India Company's service should be admitted to registration after not less than five years' actual service.

The Court of Assistants of the Society of Apothecaries, in whom the control of the society is vested, is a self-elected body. The society would not be indisposed to adopt any change in the mode of election of that body which might, upon due consideration be thought advisable, but the subject has been found one of considerable difficulty. An election by the members of the society at large appears fraught with numerous objections, and the creation of a limited class for the purposes of the franchise has been found in practice to be productive of great dissatisfaction. The society, in truth, is not prepared, at the present moment, to suggest any specific change in the mode of election of its governing body, but it would be willing to give the most favourable consideration to any alteration in this respect which you might recommend for adoption.

I have the honour to be, Sir,

Your most obedient humble Servant,

J. B. EYLES, Master of the Society.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

The New Series of the *Medical Times*, in its improved dress, has given much satisfaction to your numerous friends in the French capital. The "inside of the cup," likewise, affords clear proof, that scientific excellence will accompany elegance of exterior. From the aid of Mr. Churchill nothing less was expected; and if you proceed, *qualis ab incepto*, success is certain. The names of Walshe, Rigby, and Lizars, which adorn your opening page, under the head of "Original Contributions," indicate that the chiefs of the medical profession no longer, as was once the case, disdain to promote the humble but most useful progress of periodical literature.

And this—pardon for the moment a digression—brings to mind, that celebrated names are not always without their inconvenience. Thus, the youth recently arrested for the contemplated assassination of Louis Napoleon, has denominated himself George Alfred Walker,—under what hallucination does not appear; perhaps, intending to consign our President to an untimely grave, he thought the name of the author of "Grave-yards" an *apropos* one. Perhaps he took Walker for some hero of antiquity. However this may be, the name was assumed, and the delinquent a lunatic.

STAPHYLORAPHY.

M. Roux has completed the reading of his long-promised memoir on this subject, at the Institut. I shall, however, notice the chief points only, for the memoir itself would make a goodly volume.

Divisions of the palate, whether congenital or accidental, present great varieties, both in degree and appearance: but, so far as the operation for their cure is concerned, we have only to consider whether the case is one of simple division of the velum palati, or of this division accompanied by a corresponding state of the palatine arch. For these distinct cases the operations are distinct, both in mode of execution and in result. For simple division of the velum, the operation is simple and well known. M. Roux has performed it 57 times out of 106 cases. Of the 57, no less than 44 were ultimately successful: we say "ultimately;" for often it was necessary to retouch the edges of the wound, to apply a new point of suture, or even repeat the operation. In most of these cases, the success of the operation was perfect, and perhaps one of the best examples may be found in Professor Stephenson, of Canada, on whom staphyloraphy was performed for the first time.

In the second class of cases, viz., those accompanied by more or less division of the soft palate, it becomes necessary to separate the two fragments of the velum from their adhesions with the posterior edge of the soft palate, and also to favour the extensibility of parts by transverse incisions. The latter may be effected by simple division of the tissues, by their complete division, or, as has been recently proposed, by the division of certain muscles. Even in the mildest cases, however, the patient must be perfectly under command; and hence M. Roux would not advise an operation to be performed before the age of manhood. In three cases of children, from 12 to 13 years, the operation failed from want of docility on the part of the patients.

M. Roux has performed this second operation in forty-nine cases out of the 106 already mentioned. Four patients were twice operated on—only one with success; of the forty-nine cases, twenty-six resulted in cure. It thus appears that the number of operations for the simple and complex cases was pretty nearly the same—fifty-seven of one, forty-nine of the other. The results are, however, very different. In the former series more than three-fourths of the patients were cured, in the second less than one-half.

ADVENTURES IN THE AIR.

In the year X. of the old Republic, M. Gay-Lussac commenced his scientific career by a balloon ascent of some 12,000 feet, into the regions of infinite space. The results of that celebrated voyage are well known. But many interesting points remained undetermined. Hence, M. Barral, one of the Professors at the Polytechnic School, and M. Bixio, a Deputy,—who, by the way, had been shot through and through the lungs in the June insurrection,—recently undertook to complete the observations of Gay-Lussac by experiments at a still greater height. Their objects were, to determine the laws regulating the decrease of temperature and moisture—the quantities of carbonic acid gas at various elevations—the action of solar heat, polarization, &c. It was determined to ascend to a height of 36,000 feet, and to attain such an immense elevation a hydrogen balloon became necessary: hence their misfortunes. The ascent took place a few days ago, from the garden at the back of the Conservatory in the Rue St. Martin. No sooner, however, were the cords of the balloon cut, than, under the influence of the hydrogen, it shot up straight into the heavens, like an arrow. The rapidity of the ascent was inconceivable, and filled the spectators with horror. Indeed no one ever expected to see the adventurous travellers again, for they were out of sight in a minute and a half, the balloon rushing up as if it never intended to stop. But stop it soon did, with a vengeance, or rather, like Cato, it seemed only to have gone up in order to come down again with the same velocity. The silken network which encloses the balloon was, it seems, too small. Hence, when the hydrogen dilated the balloon in the upper regions, the boat was drawn upwards into the body of the machine, and the travellers ran instant risk of being asphyxiated by the hydrogen. Both were seized with violent vomiting, and not a moment was to be lost. M. Barral, therefore, made a large gash with his knife in the lower part of the balloon, and at the same instant an enormous rent took place spontaneously in the upper part. The descent now began at once, as fast as that of Icarus—more than thirty-five miles an hour. In vain was all the ballast, everything in the balloon, even to the clothes and shoes of the unfortunate adventurers, thrown out. Down they continued to tumble with a rapidity frightfully increasing every second. M. Bixio's good luck, however, stuck to them. They made a soft fall of it, in a newly-ploughed field, in which poor Barral was literally buried, and bruised sorely, though not seriously hurt. M. Bixio escaped scot free. Under these circumstances, you can readily conceive there was little time for scientific observation. Indeed, the only point ascertained was that the stratum of clouds which they traversed

was 9,000 feet thick, and that the thermometer, immediately afterwards, marked zero. They intend making another attempt—*magis fortuna fiat.*

SCOTLAND.

ON THE THEORY OF THE PRODUCTION OF PULMONARY EMPHYSEMA.

The summer session of our Medico-Chirurgical Society was wound up on Wednesday, July 3, with a debate arising out of a paper read at the previous meeting by Dr. William Gairdner. The paper turned on several points in the pathology of the lungs, bearing in particular on the origin of vesicular emphysema. The chief topics touched on were illustrated by numerous pathological preparations. One of the purposes which Dr. Gairdner proposed to himself was the illustration of the dependence of what has been termed lobular peripneumonia on a previous attack of bronchitis, and in connexion with this to show the mode in which vesicular emphysema, or dilatation of the air-cells in other parts of the lung is produced. Among the views taken by the author, one was that, in certain cases when obstruction of parts of the bronchial system occurred as the effect of inflammatory action, the portions of the lung which should be supplied by these with air became finally collapsed and impervious, and therefore liable to be confounded with portions of the organ condensed by inflammatory deposits. This led him to consider lobular pneumonia, vesicular pneumonia, the "atelectasis pulmonum" of Jörg, and other allied subjects, and all in connexion with dilatation of the adjacent air-cells. On these and various connected topics a long discussion took place between the late and the present pathologist to our Royal Infirmary,—that is, between Dr. Bennett and Dr. Gairdner. There can be little doubt, we think, that bronchitis is a primary element of the disease which has been termed lobular or disseminated pneumonia; and we confess that the resemblance which the affected parts bear to the impervious parts of the lung in the "atelectasis pulmonum" of Jörg, that is to those portions of the lung in new-born infants which fail to undergo the due expansion, is favourable to the idea that the firmness of lobular pneumonia is the result of collapse; but we think it would be wise to seek a longer probation for these views before their final reception as truths in pathology. Dr. Gairdner appealed in the debate to numerous preparations of lungs, showing extensive impervious portions; but the evidence of the connexion of this state with obstruction of the air-tubes leading to the same was less satisfactory.

As Drs. Bennett and Gairdner were at one on the general doctrine of the production of dilatation of the air-cells as a result of obstruction in other parts of the lung, little allusion was made in the main debate to this point, though a principal one in the paper; but, as Dr. Bennett incidentally observed that Laennec's opinion on this subject was now exploded, a new debate afterwards arose, in which Mr. Syme, who was in the chair, and Dr. Seller took part against the former disputants. The question essentially at issue was whether emphysema, that is the dilatation of the air-cells, was caused by expiration, as Laennec taught, or by inspiration, as maintained by C. J. B. Williams, Rilliet, Barthey, and other recent authorities? This question led to an appeal to the physiology of respiration, and the discussion of some of the points concerned was prolonged among knots of the members after the meeting was over.

It is but seldom that a pathological difficulty can be solved at once by a reference to physiological principles; but if there be any such case, it is peculiarly that in which the mere mechanism of an act in the animal economy is alone concerned. Now this is very much the case in the dispute here referred to.

Laennec's view of the production of dilatation of the air-cells is far from being in every respect satisfactory; but, nevertheless, it involves throughout the principle that expiration is the cause of this dilatation. Dr. Williams, on the other hand, without absolutely rejecting Laennec's explanation, says, "when there is partial or complete obstruction in any of the bronchial tubes or cells, the inspired air cannot press with the usual force beyond the obstructions, but it will press with more than usual force into the adjoining tubes and cells to which its access is quite free, and these latter may thus become distended, and in time permanently dilated." We have not discovered whether this idea originated with Dr. Williams, or was drawn from the other side of the Channel, where, unquestionably, it prevails to no small extent. But the passage above quoted plainly involves a physical error, unless it can be shown that the act of inspiration requires some modification of the physical laws by which it is commonly explained. According to the view universally taken of the mechanism of respiration, the air, it is true, enters the air-cells by the pressure of the atmosphere; but this pressure only operates in proportion as the air previously in the air-cells becomes rarefied during the enlargement of the chest by the retrocession of its walls. Thus the air, in reality, is not forced, but, as it were, invited to enter by room being made for it, and as soon as the air in each air-cell acquires again the same density as the air of the external atmosphere, the descent of air ceases. Thus, during the whole act of inspiration, that is, during the whole period occupied by the enlargement of the chest, the force by which the air-cells are distended is less than the existing pressure of the atmosphere, being the effect of rarefying air; and after that act is completed, the force by which they are kept expanded is simply the ordinary atmospheric pressure,—a pressure to which they are at all times subjected between the completion of inspiration and the beginning of expiration, as well as between the completion of expiration and the beginning of a new inspiration. On the contrary, the air-cells, on their inner surface, are, during every act of expiration, subjected to a pressure greater than the atmospheric pressure, in proportion to the magnitude and the suddenness of the expiratory effort and the obstacles offered at the time to the exit of the air.

Again, to whatever extent portions of the lung may have become impervious to air, the force with which the still pervious air-cells are distended in inspiration never can exceed the existing atmospheric pressure; for, since the air descends into these from without, only because the air there is rarefied, as compared with that of the atmosphere, it is plain that, up to the moment when inspiration is completed, the pressure exerted on their internal surface is less than that of the atmosphere, and then it becomes exactly equal to the existing atmospheric pressure, beyond which it cannot pass except in expiration.

On what ground, then, can it be supposed, that when any considerable portion of the lungs becomes impervious to air, the air in inspiration can enter with greater force into the still pervious parts? Even let it be assumed that a very large part of each lung towards the mediastinal surface has become obliterated, then it may be admitted, that the parts towards the costal surfaces will expand in every inspiration to the fullest extent of which they were capable even in forced inspirations during the healthy state. These pervious portions of the lungs will, indeed, perform a great deal more work than they were previously accustomed to perform; but still the pressure on the internal surface of the air-cells, during inspiration, will be less than the atmospheric pressure, and when inspiration is completed, the distending force will not exceed that pressure. In such a case, did the circumstances permit the continuance of health, a new development in some degree of the still expansible parts of the lungs might be looked for. Yet the exact source from which this new development could be derived does not quite clearly appear. The readiest supposition is, that the natural expansibility of the lungs is greater than the ordinary expansibility of the chest; and hence, when circumstances arise to give an increased activity and development to the chest, that a store of lung is provided beforehand ready for the increased expansion, which has become necessary, without any undue distension or loss of elasticity in the air-cells. Whether latent air-cells come to be evolved, or new ones produced under such circumstances, are points on which no information appears to have been collected. Any considerable enlargement of the previously existing cells would not serve a physiological purpose, that is, indicate the operation of a final cause, since the smallness of the air-cells in warm blooded animals, contrary to what holds in reptiles, is an essential condition to the due purifying of the blood. One thing is certain, that when circumstances requiring an increased energy of the functions of the chest become permanent, as in families of fishermen, of pilots, and the like, and among the inhabitants of such lofty situations as the high table-land of South America, in the course of generations, the chest becomes of a size considerably beyond its ordinary dimen-

sions. But, to return to the case supposed of obstruction in the mediastinal region of both lungs, if it be still insisted on that the non-activity of the pervious parts would be such as could produce a vesical emphysema, there is only one physical condition on which such an occurrence could be explained, and the assumption of that condition is diametrically opposed to what the science of physics teaches as to the act of inspiration. For it can easily be shown, that unless on the assumption that a vacuum takes place between the pleura costalis and the pleura pulmonalis in inspiration, no force exceeding the existing atmospheric pressure can distend the air-cells except in expiration. But those who make such an assumption, put themselves out of the pale of scientific debate. They stand convicted of a heterodox opinion, not merely in physiology, but in physics. As physiologists merely we should have nothing more to say to them,—we should leave them to the tender mercies of the exact men, whose science rests on the stubbornness of space and number. As to the bearing, however, of this assumption on the point at issue,—namely, the forcible distention of the air-cells by the air in inspiration, it may be illustrated by such an experiment as the following:—If the lungs, taken from the body after death (and let them be supposed to be in a sound state), be placed in the receiver of an air-pump, and made to communicate with the external air by means of the trachea, or a tube fixed closely into it, and the operation of exhausting the air from the receiver commenced, at each stroke of the piston the lungs will expand, and ere long will attain the fullest dilatation which they were accustomed to undergo in forced inspiration. If the air be still further withdrawn from the receiver, the interior surface of the air-cells begins, from that moment, to be distended with an unaccustomed force, not by the increase of the pressure from the atmosphere, but owing to the rapid diminution of pressure on the external surface of the lungs; and, by the time that a complete vacuum has been produced in the receiver, the pressure distending the air-cells is equivalent to what the pressure of two atmospheres would be, if the external surface of the lungs were still supported by the ordinary atmospheric pressure. Thus, if there be any circumstances under which the force of the muscles of inspiration can produce a vacuum between the pleura costalis and the pleura pulmonalis, after the lungs have reached the fullest distension of which they are capable by causes of ordinary operation, then the atmospheric pressure acting within will distend the air-cells with twice its ordinary force. This, then, is the assumption which those must make good who support the view above quoted from Dr. Williams; and to apply this assumption more closely to the case before supposed of extensive obstruction towards the mediastinal surfaces of both lungs, the pulmonary organs in this state must plainly have lost a great part of the entire expansibility which belongs to them in health, while the muscular powers which expand the chest are still, potentially at least, in their ordinary condition; they have to prove, then, that the ability to expand the chest to its full extent still really exists, while the lung has become incapable of filling up the vacuity in the common mode of its distension, and, therefore, when the full power of the chest is exerted, that a vacuum must arise between the two pleuræ, and that this vacuum must come to be so far filled up by a forcible dilatation of the air-cells constituting a vesicular emphysema.

To such views the evidence in favour of the production of vesicular emphysema by acts of expiration stands in striking contrast. In expiration the air is squeezed out of the air-cells by the compression of the lungs under the contraction of the cavity of the chest, and therefore the distending force then applied to the inner surface of the air-cells is greater than ever can occur in inspiration, being proportioned, as above stated, to the rapidity, extent, and difficulty of the expiratory effort. In cough and sneezing, and above all in violent muscular exertion, when the breath is strongly held the whole lung is much compressed, and the contained air, therefore, powerfully condensed before it is suffered to escape by the relaxation of the muscles of the larynx. If the air-tube leading to a lobule or to several lobules, should become obstructed, particularly after a full inspiration, the cells of that part of the lung cannot empty themselves, and therefore so long as the obstruction remains, these are violently compressed at each powerful expiration, and can hardly fail to become dilated if the obstruction continue for some time, or even for a short period, if the expirations in the meantime have been violent. Such is a type of the cases of the so-called vesicular emphysema or dilatation of the air-cells in a part of the lung; and it seems probable that the cause of this emphysema, when it is in the neighbourhood of condensed portions of the lungs, is that these solidified parts are pressed against some of the adjacent air-tubes during forcible expirations, and, by acting in a valvular manner, and confining the air within the air-cells, give rise to their gradual dilatation.

LIVERPOOL.

A casualty of a serious character took place on board a ship called the Hemisphere, in consequence of a severe gale, when half across the Channel. The wind blew a considerable portion of the masts, and, at the same time, one or two of the crew overboard; a few fell on deck, and were killed or seriously injured. After the accident, the vessel was towed into the Mersey by the steamer Queen. The wounded men were conveyed to the Northern Hospital.

On Friday, an inquest was held on the bodies of two deceased seamen, and a verdict of "Accidental Death" was returned. On Saturday another inquiry took place in reference to the death of Wm. Blair, who had died in the meantime, and considerable doubt was expressed as to the surgical treatment he had received. After some evidence had been taken, the coroner invited the particular attention of the jury, stating that a little circumstance had occurred, when the captain was giving his evidence the day before, which had made the case pregnant with every feature of manslaughter.

It was a notorious fact, that there was a great mortality on board emigrant ships, whilst convict ships and other vessels comparatively escaped from fatalities of a like nature. Mr. Taylor, of the firm to which the ship was consigned, did not know the surgeon, (F. Wintushka,) except that he was a German, and that he had his proper diplomas. Captain Whittesley stated the circumstances of the accident, and that there were 460 or 470 passengers on board. He had engaged a man as a doctor, but did not know his name. He had a passage for his services, and he (the captain) took his word that he was a doctor. Wm. Herritt witnessed the accident; the right arm of the man was broken, and hung by a piece of flesh, which the doctor severed with a carving-knife, and then tightly tied up the stump with a bandage. The doctor did not appear to have any surgical instruments. It appears, according to law, emigrant vessels sailing to North America are not required to take a doctor, but only medicines. Mr. B. Wall, house-surgeon to the Northern Hospital, stated that the deceased's death was caused by mortification; the bandage on the arm was not tied in a proper manner after the amputation, and the arteries had not been secured otherwise than by the bandage. The end of the stump was strangulated, and circulation completely arrested in consequence. Verdict, "Accidental death."

I wish briefly to call the attention of your readers to the above facts, not because of the bad surgical treatment, or because I think the man professing to be a surgeon was not qualified; and though these are questions of importance, I put them, for the present, on one side. The law with respect to emigrant vessels being required to carry duly-qualified surgeons is incomplete, and the sooner it is altered the better.

Accidents here resulted of a serious character, and we can have no doubt that they occur frequently when such a number of persons are on board. I understand, but cannot vouch for the correctness of the statement, that among the passengers were two pregnant females. If this be true, we may justly ask, who was to have attended them in case of any danger or difficulty which might have happened. It is possible, also, that some disease might have sprung up in the passage among the emigrants; and, though that passage might have been only of a few weeks' duration, I think it unreasonable, ill-judged, and highly imprudent, to leave their recovery to chance.

The surgeon in the above case had no instruments. This circumstance leads me to remark, that I fear this happens too frequently. The only reason accounting for it is,—because the emigrant surgeon's pay is too inadequate to enable him to provide himself with everything that he is likely to require in the course of a long and tedious voyage.

There is no lack of surgeons well qualified, if the owners of ships will see that they are well and duly paid.

The number of deaths in the borough, for the week ending Saturday, July 6, was 180, but 31 fewer than the corresponding week of last year. Diseases of the lungs have been prevalent, and infant mortality unusually great, there being 114 children out of the total number of deaths, and 60 of them below the age of twelve months.

For the quarter ending June 30th, the deaths were 2287, being 152 fewer than the previous quarter, the mortality of which was lower than any then recorded, and 607 fewer than the corresponding quarter of 1849, after deducting 613 deaths from cholera. Zymotic diseases caused 473 deaths, against 772 in last year's quarter, excluding cholera. Diarrhœa is prevalent among children. There are a few cases of cholera. The mortality from all other epidemic diseases is below the average. There have been 21 deaths from small-pox. Disease of the lungs caused 733 deaths, being a weekly average of 56 against 70 in the previous quarter, while the mean temperature, 54°, was 13° higher than in the former quarter.

GENERAL CORRESPONDENCE.

CRANIOTOMY.

[To the Editor of the Medical Times.]

Sir,—I am aware that it is by no means customary for medical periodicals to review, or make critical remarks upon, original communications coming out in contemporary journals. This, I believe, arises rather from an idea that such productions are generally of too ephemeral and evanescent a character to merit such notices, than from any conventional agreement or understanding among journalists on the subject.

Cases, however, do now and then occur, where, I think, the interests of medical science, and, still more, of humanity, call upon journalists, in the faithful discharge of their important public duties, to depart from the usual custom; and it is to direct your attention to a recent publication, which I consider to be of this nature, that I address this to you.

If you will turn to No. 12 of the *Provincial Medical and Surgical Journal*, June 12th of this year, page 318, you will find there an account of three cases of *craniotomy*, containing matter that, in my mind, demands the notice of the profession.

I refrain from making any remarks, one way or the other, upon those cases myself; but I trust that you, in the exercise of your judicial functions as a journalist, will review them, and say in how far the practice pursued in each was right or wrong, according to the ethics and usages that preside over the obstetric branch of our profession.

I am, Sir,
A Subscriber to your Journal, and an Accoucheur of long experience, but now no longer in practice,
M.D.

4th July, 1850.

[We agree with our Correspondent, "M.D." that some remarks on the three cases of craniotomy to which he alludes are perfectly justifiable, nor do we consider that any strictures which we feel call upon to pass at all refer to our worthy contemporary, but to Mr. John S. Bartrum, the author of the report. Mr. Bartrum states, (Case 1,) that the powers of the patient, "from want of food, with prolonged exertion, were utterly prostrate; the os uteri was not fully open, though dilatable; the uterine pains had wholly left her, and the head had just entered the pelvis, which was well formed. The woman seemed moribund, and it was necessary to act as vigorously as possible. Ergot, stimulants, and pressure on the uterus, induced no uterine contraction. The head was perforated, and brought down by the craniotomy forceps. The uterus then slowly contracted under firm pressure and the free use of stimulants. Mr. Bartrum asks, "Was the practice adopted the correct one?" We reply, "by no means:" in other words, we deem it to have been exceedingly *incorrect practice*. As "the uterine pains had wholly left her," why meddle with and disturb the poor creature, exhausted with starvation and long travel? Why not take advantage of the opportunity which Nature had so distinctly offered, of recruiting her strength with food and rest? Why force her to swallow ergot and stimulants, and why apply pressure on the uterus for the purpose of inducing uterine contraction, when the uterus was perfectly quiescent; or, in other words, exactly in that state in which it was most important to abstain from rousing it into action? Why not follow the admirable rule of La Motte, "All we can do in these cases is to wait with patience, without disturbing the patient; resting satisfied with making her take something easy of digestion, as a little soup or broth, or a toast in wine, to revive and refresh nature." The pelvis "was well formed;" the head presented; "the os uteri was not fully open, though dilatable." What unfavourable symptom was there about her labour which might not reasonably be expected to be relieved by rest and food? What indication was there to justify perforating the head of a living child, and bringing it "down by the craniotomy forceps," in the absence of all uterine action? On these grounds, do we consider that the practice adopted in this case was incorrect. Neither are we inclined to praise the correctness of the remarks which follow.

With the second case we have no fault to find. A very unusual degree of pelvic deformity not only required perforation, but also rendered the artificial premature labour, for the purpose of facilitating the extraction of the child, perfectly justifiable, and this must continue to be the case so long as the results of the Cæsarean operation in this country are so unfavourable.

The third case, like the first, must incur our disapprobation. It was a simple first labour, beginning (as is very commonly the case) with spurious pains, which produced much suffering. "The os uteri was scarcely *patulous* (*Anglicè* open) the vagina lubricated, and the pelvis well formed;" and yet immediately afterwards he states, "Whether the promontory of the sacrum projected, I did not note!" Was there no cause for these severe false pains? Could no source of irritation be discovered which produced this irregular action of the uterus? What was the state of the bowels? This appears to have been entirely overlooked (at least no allusion whatever is made to it). Two 20 minim doses of laudanum were given with "little tranquillising effect." After twenty-four hours of no sleep, and excessive pain in the sacrum, the os had become "more *patulous*, but still thin and rigid, the head not having at all descended into the pelvis." After another night passed "without more than snatches of sleep," in spite of a large opiate; the head had not descended. "She still complained of intense pains, and there were few, or but irregular uterine contractions, producing but little effect upon the child, which was felt to be quite lively;" we presume also that she was unable to empty the bladder, as the catheter was passed, and about a pint of urine drawn off. He had been sent for to her in severe suffering on Saturday evening, she having already passed two nights sleepless from pain. At three p.m., on Tuesday, he leaves her in charge of the gentleman whose patient she was, "fully expecting that some few hours would end the matter," although "the os uteri was not yet fully dilated, and thin-edged. There were no uterine pains, and the head had scarcely advanced." We would ask, on what grounds did Mr. Bartrum expect that a "few hours would end the matter?" The case had commenced on the Thursday, with very severe spurious pains, arising, in all probability, from deranged or loaded bowels, as is so commonly seen, especially in first labours. Not the slightest attention appears, from the report, to have been paid to this important point; but dose after dose of laudanum given, and, as might have been expected, without relief.

How often do we meet with cases (especially first labours) where many hours have been spent in spurious pains but severe *real* suffering, the os uteri partially dilated and its

edge thin and tense, and where the whole state of affairs is changed, almost like magic, on clearing out the bowels by a good dose of oil or a large enema? The pains become genuine, and far more tolerable, the os uteri relaxed, cushiony, and dilatable, and labour progresses now as quickly and prosperously as before it did the reverse. In this case, however, there seems to have been a certain amount of pelvic contraction, evidences of which occur in the report, apparently without the author being aware of them. On the Sunday morning, after a third sleepless night of severe suffering, Mr. Bartrum "found the os uteri dilated to the size of a crown-piece, thin and rigid, *the head high up*, and presenting naturally, she having had no sleep, and *complaining excessively of pain in the sacrum.*" Sunday night came, the os uteri had become more "*patulous*, but still thin and rigid, *the head not having at all descended into the pelvis*;" another night and nothing "more than snatches of sleep." Monday morning, "*the head had not come down.*" "She still complained of intense pains, and there were few or but irregular uterine contractions, producing but little effect on the child, which was felt to be quite lively." Was the head being high up at the commencement of the first labour a proof of "the pelvis being well formed," when it is known invariably to occupy the cavity of the pelvis for the last week or two of pregnancy when this really is the case? What would the fact of the wretched sufferer having been about seventy hours in "intense pains," with the os uteri still thin and rigid, and the head not advanced, suggest to the veriest tyro of a midwifery class, but that some mechanical obstacle existed to the entrance of the head into the pelvis; or, in other words, that the pelvis, instead of being "well formed," was contracted; that the continued rigidity of the os uteri, and thinness of its edge, were owing to the lower part of the uterus being severely pressed between the head and the contracted brim, thus cutting off from the os uteri the effects of the uterine contractions; in addition to all which, was the utter inattention to the state of the bowels, in the first instance, if we are to be guided by Mr. Bartrum's report of the case; and yet, with all these self-evident reasons for undilated os uteri, and non-advance of the head into the brim of the pelvis, he leaves the poor creature, after about seventy hours' suffering, "fully expecting that some few hours would end the matter"!! Another sleepless night of suffering, and nature was becoming exhausted, after having exhibited an amount of endurance which is rarely met with. "Pulse nearly 130; tongue becoming dry; *the head had not entered the pelvis*, the scalp being more puffed; *the os uteri had not altered in character.*" And yet, with all these striking evidences of contracted pelvis staring him in the face, he actually goes on to observe:—"In fact, all that had been wanting for the past two days was uterine action, which Mr. Mason had tried, since I left her, to induce by infusion of ergot, without permanent effect"!! With such a fact as this before us, viz., of the head still resting on the brim of the pelvis, in a primipara, after actually eighty-four hours (at the very least) of suffering, we would ask, what was the uterine action to do, which was to be "all that had been wanted for the past two days," and which his colleague, worthy of himself, had endeavoured to exasperate by ergot? It could not force the head even into, still less through, the pelvis; this was sufficiently clear, from the results of the last eighty-four hours; it could, therefore, do only one thing, viz., rupture the uterus, and this would infallibly have happened, if there had been that uterine action which was "all that had been wanted for the past two days."

That there really was a sufficient amount of "uterine action," corresponding to the *natural* degree of resistance to the passage of the child, is proved by the immediate effects of perforation. "The moment the head was but slightly lessened, the system became tranquillised, uterine expulsive pains came on, and, within an hour, a fine large child was born, the placenta following in an hour, without any interference." As soon as the head ceased to jam the lower part of the uterus between itself and the pelvis, the state of general irritation and excitement ceased, the os uteri became fully dilated,—not because "uterine expulsive pains came on," for they had not gone off, but because they were now enabled to act upon the os uteri; and, moreover, the head, being lessened, could now be forced down upon the os uteri, and thus also assist in dilating it. So much for these two, to our mind, much mismanaged cases. We will pass by Mr. Bartrum's "calm review," expressing our surprise that there should have been no one of "the Bath and Bristol branch of the association," before which they were read, who would point out an amount of malpractice in midwifery which would have horrified old William De la Motte a century and a half ago.—Ed. *Med. Times.*]

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—Your Correspondent has changed his ground, or else, in common with most of your readers, I have mistaken his meaning. His ground of the accusation of charlatanism was, I understood, the public profession of homœopathy, and not the exercise of the undoubted right of a physician to prescribe in any way that his judgment points out to be the best. Now I have shown that the title of homœopathist is not assumed or professed, but is merely a name given to designate a mode of practice new and different from other modes, or is applied in some cases as a term of opprobrium, in the same way as the terms Whig and Tory are given to persons holding certain political opinions. In common with many others, I think it might perhaps have been better if the name had never been invented, but the principle received among other medical theories at its proper value, without any special name begin given to the practice founded on it. It is, however, too late to mend that now: the name exists; and our only care should be that no improper meaning be attached to it, and it should not be made a fault in those who bear it involuntarily.

But, not content with the assurance that I make no public proclamation to all and sundry of the mode in which my private practice is conducted, your correspondent proposes that I should take measures to conceal my mode of prescription from the patients under my care! Every one who has seen homœopathic prescriptions must know the absurdity and futility of any attempt at concealment of their nature; but, even were it possible, I, for one, would scorn any such attempt at deception, and I hope there is no one who would not scorn any such procedure. If I consider the homœopathic method the best, of course I must avow it openly, be the consequences what they may. Your correspondent has, no doubt, forgotten himself strangely in making this proposition, and it is one which, I venture to predict, will find little sympathy among your readers. He has mistaken the century in which we live, if he thinks that the progress of science in each department is now to be hidden from the *profanum vulgus* by the adoption of mysterious devices for the purpose of deception and concealment.

Apart, then, from his plan of concealment, your correspondent admits there is no offence against ethics in prescribing homœopathically in all cases in which a physician thinks it the best way. Now, the number of these cases in no way affects the morality of the question, and therefore I merely said, I prescribed so in the great majority of cases. I might have used even stronger terms, as it is in fact only in a small proportion, which may be called exceptional, that I resort to any other than homœopathic prescriptions. In one sense, indeed, my former letter may be called a hypothetical statement of the case; for, in describing my own practice, I have described that of the general body of homœopathic practitioners throughout the kingdom, for they all employ, in certain circumstances, auxiliary means which are not homœopathic—such as I have enumerated; and I believe it is thought there is no one more thoroughly a homœopathist than I am. Your correspondent must therefore abandon his charge of charlatanism against homœopathic practitioners, unless he finds some better reasons than those he has already given. But he will seek in vain for such reasons in the field of ethics; for the question of in what

and how many cases it is right or wrong to use homœopathic treatment is one that regards matters of fact, and can only be determined by experimental investigation. It is no wonder, then, that his logic proves faulty in attempting an impossibility; but it is certainly strange that I should have to defend the honour and dignity of our common profession against the assaults of the self-constituted champion of medical ethics. The art of medicine is not that of an ignoble craft or guild, whose rules are fixed, and cannot be altered, even for improvement, without the penalty of expulsion to the transgressor. The art of medicine is a noble art—the immediate offspring of science, which is constantly advancing and enlarging its boundaries with the progress of discovery; and, in consequence, it is an art which is always in the act of change. There is, therefore, no alleged discovery which it is not the right and even the duty of the physician to examine openly, and, if he finds it worthy, to adopt openly without forfeiting his position. To deny this would be a libel on the profession. But as all discoveries involving a practical change of any magnitude require time—generally at least a generation—to be thoroughly weighed and appreciated, their exact value can only be determined by the verdict of posterity; and thus, in all generations, the members of our profession must expect to meet with differences of opinion and practice amongst themselves, and must be prepared mutually to tolerate these differences as intellectual errors, and not punish them as moral faults. There remains, then, no plea on which a medical man can refuse to meet a legally qualified homœopathic practitioner, simply as such, in consultation on any neutral ground, such as surgery or the diagnosis of disease, without doing injustice to a professional colleague, and bringing shame upon himself.

The letter of Dr. Inglis is mainly composed of arguments against the truth of homœopathy, which is not the subject under discussion. I was not aware that you admitted discussions on that subject into your pages, but if you are willing to receive it, I think I could send an answer to Dr. Inglis's arguments.

ONE WHO IS CALLED A HOMŒOPATHIST.

9th July, 1850.

[We have given insertion to this letter, and shall open our columns to a reply; but, after that, we must decline any further debate on a subject which needs no mystifying. Our own opinion is quite decided, that no practitioner can meet a man who professes the arrant humbug of treating disease by infinitesimal doses. He could still less meet one like our correspondent, who, we must say, appears inclined to avail himself of the present fashionable bias in favour of homœopathy, while he adopts, at the same time, the very practice of common doses, which Hahnemann so vehemently condemned. In doing so, his conduct is not only wholly inconsistent with the hypothesis he professes, and with the practice he ordinarily pursues, but necessarily subjects him to grave imputations on his professional honour and motives of action. The homœopathists would, we should think, hardly own in him a professional brother, and the regular practitioner cannot possibly associate him with any other class than that whose members avail themselves of the mistaken opinions of the day for their personal advantage. Although, however, we close our pages on this point of ethics, as unworthy of further debate, we shall not object to allow our correspondent, if he pleases, to state his reasons for the opinion he professes, viz., that *similia similibus curantur*.—ED. *Medical Times.*]

MEDICAL REFORM.

Mr. Gibson will be obliged to the Editor of the *Medical Times* to give insertion to the following letter, addressed

"To J. WILSON PATTEN, ESQ., M.P.

"SIR,—I beg to acknowledge the receipt of the Parliamentary Paper upon the subject of Medical Reform, which you have done me the honour to forward, for which I humbly entreat you will accept my deep sense of gratitude.

"It is a lamentable circumstance, and deeply to be deplored, that the subject, although one of vital importance, cannot be brought to a satisfactory termination, in consequence of the divisions in our own ranks, as well as an imperfect knowledge of its merits by the great mass of our profession and the public in general.

"The principal point upon which we are now at issue is, whether the Charter of the Royal College of Surgeons is to be so modified as to make it the College of General Practice, or an independent College of Medicine, Surgery, and Midwifery, is to be instituted.

"If the former proposition were practicable, there is no doubt but it would meet with universal approbation amongst the general practitioners.

"The National Institute has long ago ascertained the impracticability of this point, as it can only be done by the Legislature forcing it upon the Council of the College of Surgeons; but as both Sir James Graham and the present Ministry have declared their objection to do so, without the consent of that body, it is futile to fight for a phantom shadow.

"There is a point of far higher importance than that of merely legislating for the profession itself,—the good of the public in general will always be the paramount object of every enlightened minister and patriotic legislator.

"The necessities of the community have called into existence a tripartite division of the medical profession,—the consulting physician, the consulting surgeon, and the general medical practitioner, the latter embracing medicine, surgery, midwifery, and pharmacy.

"Many of our profession oppose the establishment of a new college upon the grounds that it would increase our medical institutions, which are already too numerous, and it would necessarily be inferior to the Colleges of Physicians and Surgeons.

"The error of the first proposition is too manifest to require any comment, as the Apothecaries' Society, with a very laudable spirit, have offered to renounce their functions as an examining body, provided the general practitioners can be incorporated into a new college, based upon the representative principle, and in accordance with the spirit of the present advanced age.

"The Apothecaries' Hall, the constitution of which, not meeting with all the requisites of a general practitioner, will be abolished as an examining board; consequently, no increase of the number of our institutions will take place.

"As regards the second proposition, I think it just as absurd, as we have no grounds for such an opinion.

"The general practitioners must all admit that we are, at present, in the lowest state of degradation, in consequence of the acts of the special Colleges.

"How a new college, based upon the liberal and enlightened principles advocated by the National Institute, will have a tendency to keep us so, I cannot for a moment conceive. No sound judging person can entertain such an opinion, if he will reflect upon it with an impartial and unprejudiced mind.

"If the general practitioners wish to elevate themselves into that social position which they are legitimately entitled to, it must be done by their own united efforts; no act of the Legislature, or the *prestige* of any of the Colleges is sufficient to effect it.

"But there is no doubt, if the Legislature would grant to the general practitioners a charter, and a Bill to regulate the practice of medicine, and put us upon a fair and equal footing, I have every reason, without flattery, to anticipate that we have a sufficiency of talent, zeal, and energy in our ranks, which would, in a few years, prove to the world that we were behind no Institution in our scientific attainments.

"By such a proceeding, the Legislature would confer upon the public one of the greatest blessings in a moral, social, and physical point of view.

"If the general practitioners were united under one Alma Mater, it would tend to dissipate all the dissensions, heart-burnings, and low petty jealousies with which we are unhappily at present distracted; and by adopting a proper code of medical ethics for our internal government, we should soon elevate our class to that noble and honourable sentiment which should always actuate a learned profession.

"If the Ministry and the Legislature are determined to remain without interfering until the profession can be unanimous upon the subject, I despair of ever witnessing such a happy consummation; and the evils which must continue to affect society, are incalculable, and which no pen can depict.

"I hope you will excuse the liberty I have taken in tres-

passing upon your valuable time. A sincere devotion to the welfare of my profession, will, I hope, be deemed an ample apology.

"Again I beg you will accept my best thanks for the many kindnesses you have favoured me with.

"I have the honour to be, Sir,
"Your very obedient, humble servant,
"Ulverston, July 8, 1850." "GEO. GIBSON.

THE CANVASS FOR ST. MARY'S HOSPITAL.

[To the Editor of the Medical Times.]

SIR,—The honesty with which *you* treat all subjects of interest to the profession, *your* evident freedom from party bias, and the truly independent tone of the *new Medical Times*, induce me briefly to call your attention to the state of affairs at St. Mary's Hospital. Do, Mr. Editor, investigate the circumstances for yourself, and favour your readers with your opinions. It is confidently reported, that certain of the candidates for the medical appointments—which, however, are yet to be declared in the Institution—are banded together to return each other by means of friends (governors for the occasion,) and the scramble of an election; that one candidate is not licensed to practise in London; that another is leagued in an unprofessional partnership with a chemist and druggist in his neighbourhood; that one writes trashy pamphlets, and leaves them on tradesmen's counters to attract patients; that much canvassing goes on through the medium of a very pretty woman; and that a Fellow of the College of Surgeons, who says he has operated thirteen times for lithotomy, goes about exhibiting his stones to testify to his qualifications. I should like, by the way, to learn the *history* of these calculi, Mr. Editor, for the specimens are unique, and remarkably large. Is it likely, Sir, that "good" men would do such things; or that men, whose names would honour the Institution, could accept of offices that would associate them with such workers of professional evil?

Can you also tell me, Sir, if it be true that Mr. Heale, of the Free Hospital, asserted in the Board-room, at the last meeting of committee, that there were only three men in the profession who could be trusted to give an honest opinion as to the qualifications of the candidates! *and that these were Dr. Watson, Dr. Bright, and Sir Benjamin Brodie.*

Yours, Q. IN THE CORNER.

[We have received the report of the Special Committee appointed to consider the best mode of electing the medical officers to St. Mary's. We have not space this week to consider it: we shall do so in our next Number. In the meanwhile we shall be glad to receive a little more light upon the subject of the above letter, both for publication and our own information.—ED. *Medical Times.*]

THE WORCESTER UNION AND ITS MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* of the 22nd ult., the following paragraph occurs:—"In the Dorchester Union the salaries of the medical men have been reduced 15 per cent." This was proposed, but the Poor-law Commissioners refused to sanction the reduction. With one exception, the proposition was rejected by every medical man connected with the union. The resistance to the reduction was so determined that two gentlemen, who were entire strangers, were actually appointed; the guardians then, and not till then, ascertained that the Commissioners would not sanction their proceedings, and the two gentlemen, becoming acquainted with the circumstances of the case, withdrew. There seemed now no difficulty in coming to an arrangement with the old medical officers, as no fault whatever was brought against them. From the withdrawal of the gentlemen first fixed on another election became necessary; but, from personal or other feelings, a third stranger was elected; and, for aught I can learn to the contrary, will displace myself and my colleague, Mr. Henry Arden.

Should any of my professional brethren be placed in a similar situation, I would urge them to resist to the utmost, and by every legitimate means; let the true and faithful unite in a body, and the Union medical officers will, at least, prevent a reduction, and in a large majority of cases will be re-instated themselves. It will rarely happen that men will be found sufficiently lean or hungry to step in between the old officers and the guardians; and, if found in that condition, self-interest—the probability of what may happen to themselves in a year or two—will be sufficient, provided a spark of honourable feeling be left, to deter them from accepting office under those who can, after a very trying and sickly year, only reward those who have exposed themselves to danger, by attempting to cut down their already 10 per cent. under-pauper-pay salaries. Sickness to an awful extent prevailed during the twelvemonths I held the appointment of medical officer of the Fordington district of the Dorchester Union. Small-pox, scarlet fever, and typhus made their appearance in the order I have named; and, in August, September, and October, diarrhœa and cholera raged. My return one week contained the names of 153 pauper patients; and for a considerable time was above 100. The guardians allowed me an assistant for *three weeks* during the latter part of that period, as it was evident no man could do the work. I had no reward or extra pay myself;—I never applied for any, as I considered my claim sufficiently manifest; and but for the very kind and able help of Mr. Henry Arden, I must have succumbed beneath the pressure of almost constant physical exertion and mental worry. The population of the district in 1841 was 3330;—one parish is within a mile of my residence; is dirty, very badly drained, and densely crowded; the people, of course, are very poor; and disease in every form and shape is always rife. Two other parishes in the district are nearly five miles from my house. For the three parishes, with the large population I have mentioned, consisting principally of the very poorest class, the magnificent sum of 57*l.* 10s. per annum was allowed; an amount which, I can assure you, barely covered the outlay for drugs and the keep of a horse. Can such a state of things continue much longer? Will medical men, as a body, tamely submit to such exaction?

I am, Sir, your obedient servant,
ALFRED EMSON.

Dorchester, Dorset, July 10, 1850.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, July 12, 1850.

BISSHOPP, JAMES, Arundel, Sussex.
BUTT, WILLIAM BOYNE, Edgware.
CARROLL, JOHN, Trim, County Meath.
EDDOWES, WILLIAM, Shrewsbury.
LATTEY, PARKE PITTAR, Harley-street.
MORGAN, JAMES HOY, Newcastle Emlyn, Carmarthenshire.
PAINE, LEWIS, Greatchart, Ashford, Kent.
PESKETT, ALFRED, Petersfield, Hampshire.
SMALL, JOHN THOMAS, Toronto, Canada.
VAN-HEMERT, FRANCIS THOMAS, Frodingham, Lincolnshire.
WIGHTMAN, WILLIAM, Swinefleet, Yorkshire.
YOUNG, CHARLES, Lewes, Sussex.

OBITUARY.—Lately, at Rickinghall, Samuel Baker Vincent, Esq., surgeon, in his 56th year. At Crieff, on the 21st, James Maxton, M.D., of Kineardine. On the 11th, at Kirkdale, Liverpool, Jonathan Greenwood, Esq., surgeon.

NAVAL APPOINTMENTS.—Surgeon Charles N. Wilkinson (1849), to the Niger steam-sloop, commissioned at Portsmouth; Assistant-surgeon John M. Duffus (1849), to the Niger. Surgeon George Doak (1841) to the Inflexible, steam frigate, at Woolwich. Surgeon Frederick Shupart (1848) to the Niger, steam-sloop, at Portsmouth. Assistant-surgeon G. A. Halkin (1850) to the Inflexible.

THE LATE DUKE OF CAMBRIDGE was a noble patron of public medical institutions. He was President of the London, Small-pox, St. Luke's, Queen Charlotte's Lying-in, and Royal Orthopedic Hospitals; Patron of the Westminster, Lock, Jews', and Charing-cross Hospitals; also of the Charitable Fund Dispensary; of the Society for the Relief of

Widows and Orphans of Medical Men; Vice-Patron of the Royal Westminster Ophthalmic Hospital; of the Royal General and Westminster General Dispensaries; and of the Royal Dispensary for Diseases of the Ear; to the funds of all of which we believe he contributed largely.

The British Medical Fund.—The *Observer*, speaking of this institution and its objects, says, it "is an instance of one of the thousand forms in which the idea that lies at the root of all socialism is gradually, unostentatiously, and most usefully working throughout all English society." We presume and believe that the paragraph is meant to be laudatory of the efforts of the founders of this institution; but it is equivocally expressed. To English ears all connexion with socialism has an ungrateful sound.

Life Insurance.—In a newspaper paragraph it is stated that "the almost unanimous opinion now formed is, that an insurance company should take the unlimited responsibility of paying the sum insured under all and every contingency, after they have once entered into the contract, and that their safeguard should be more accurate preliminary inquiries before they commit themselves." This can only be arranged by feeing the medical attendant of the insurer, as he is the only person who can give true and important information respecting the candidate's health. Were life insurance-offices to do this, they might dispense with the services of a permanent medical staff.

Seamen's Hospital.—The number of patients received during the last quarter, was 14 from Her Majesty's ships, and 506 from British and foreign shipping; out-patients, 389. Total number of patients relieved since the first establishment of the hospital in 1818, 62,100. The balance sheet showed, that since the last meeting donations to the amount of 880*l.* 15s. 11d. had been received; 635*l.* 7s. 6d. subscriptions, 732*l.* 18s. 6d. dividends, 209*l.* 6s. 8d. fines and penalties under the Merchant Seamen's Act; making a total of 3218*l.* 4s. 7d., of which 1637*l.* 0s. 7d. had been invested in stock. The ordinary expenditure for the last quarter was 1588*l.* 12s. 5d. A donation of 100*l.* had been received from Earl Spencer.

Lunatic Asylums.—According to a return to Parliament recently issued, there are 329 governors of lunatic asylums in Ireland; also 426 officers and servants belonging to the district asylums, their annual pay amounting to 8994*l.* 17s. 9d. During the three years ending 31st last December, 674 urgent cases were admitted. The total number of patients during that period was 7320; the number of curable cases 2938, of incurable cases 4382.

St. Pancras.—The medical expenditure of this parish, from March, 1849, to September of the same year, was 721*l.* 7s. 9d.; from November, 1849, to March, 1850, it was 796*l.* 14s. 10d. The parish authorities, in addition, subscribe 30*l.* to University College Hospital, 15*l.* 15s. to the Rupture Hospital, 15*l.* 15s. to the Fever Hospital, besides 111*l.* 6s. paid to that Hospital for patients, 1*l.* 13s. to St. Bartholomew's, 10*l.* 10s. to the Ophthalmic Hospital, and 19*l.* 12s. 10d. to the Orthopedic Hospital, making a total of 204*l.* 11s. 10d.

Cholera.—A letter from Prague, dated 26th June, is quoted in *L'Union Méd.* of July 9th. The cholera had been very severe for three weeks, but was commencing to subside. It re-appeared just a year after its first attack. Altogether in Prague, since the attack of 1849, there have occurred 1606 cases and 866 deaths, in a population of 120,000 souls. The cholera has also re-appeared, with great severity, at Tunis, in Africa, and in Kambodia.

Norwich Hospital.—Mr. Firth, the assistant-surgeon to this hospital, and candidate for the surgeoncy vacant by the death of Dr. Crosse, finding his prospects of success to be very slight, resigned his candidature at the day of nomination. Mr. Nichols was consequently elected without opposition. The proceeding was hardly a fair one. Mr. Firth, having served as assistant-surgeon to the hospital for many years, ought to have been elected surgeon as a matter of right. His being passed over infers a slur on his professional reputation which no one had a right to cast.

Brotherton, Yorkshire.—The inhabitants and parishioners of this place, on Tuesday, the 9th inst., through their vicar, the Rev. G. E. Larden, M.A., presented Mr. Wales and Mr. Hill each with a very elegant and costly timepiece, together with some other handsome accompaniments, in testimony of their esteem and kindly feeling towards those gentlemen, for their assiduous and voluntary medical services rendered to the poorer classes during the late visitation of cholera. The following inscription was appended to each respectively:—

Viro optimo
{ Jacobo Edvardo Wales. Arm. L.A.S. }
{ Johanni Hill. Arm. M.R.C.S. }
ob munera non sine voluntate
susecpta et non sine periculo confecta
in hujus Paroeliæ pauperes inter
choleram A.D. MDCCCXLIX sæviendam
D. D.
Incolæ Paroehique Brothertonenses.

HEALTH OF LONDON DURING THE WEEK.

In the week ending last Saturday, the deaths registered in the metropolitan districts were 781; whereas the average derived from ten corresponding weeks of 1840-9, is 886, or, augmented in the ratio of increase of population, 967. Compared with this latter number, the deaths of last week exhibit a decrease of 188. Taking the ten weeks of previous years, namely, the twenty-eighth of each year, it appears that the lowest number occurred in 1843, and was 757, while the highest occurred in 1849, and was 1369, when cholera was making considerable progress. The deaths caused by diseases of the zymotic or epidemic class were last week only 168; in the corresponding weeks of 1845-8, they fluctuated between 167 and 319, and in the same week of last year rose to 630. In the present return, small-pox numbers 9 deaths; measles 16; scarlatina 23; and hooping-cough also 23. The first three epidemics are less fatal than usual, and the mortality from the last differs little from the average. Typhus carried off 30 persons; it fluctuated in the ten corresponding weeks between 18 and 59, the increase falling on the later years. Diarrhœa, which the summer usually calls into activity, was fatal during the week in 37 cases, all except 3 having been amongst young persons; the average is 39, and as further proof that up to this period there is no striking development of the disease, it is sufficient to state that in the same week of 1846 the deaths from diarrhœa were 87; in that of 1847, 32; in 1848, 64; and in 1849, 89. Last week 7 persons, of whom 3 were children, were registered, who had died of cholera; but in most of the cases it appears to have been the common English epidemic, and it is not stated in any case that the disease had assumed the malignant form.

MORTALITY TABLE.

Deaths in the week ending Saturday, July 13, 1850.

(Metropolis.)

Causes of Death.	June 29.				Sum of Ten Weeks.
	0	15	60	All Ages	
All Causes	362	267	142	781	8860
Specified Causes	360	267	141	769	8811
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	138	23	7	168	2344
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	1	19	16	36	429
Tubercular Diseases	58	100	4	162	1867
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	43	30	31	104	1138
Diseases of the Heart and Blood-vessels	...	13	8	21	228
Diseases of the Lungs, and of the other Organs of Respiration	42	27	18	87	769
Diseases of the Stomach, Liver, and other Organs of Digestion	21	25	13	59	616
Diseases of the Kidneys, &c.	...	7	4	11	57
Childbirth, Diseases of the Uterus, &c.	...	10	1	11	82
Rheumatism, Diseases of the Bones, Joints, &c.	1	6	1	8	70
Diseases of the Skin, Cellular Tissue, &c.	...	1	...	1	8
Malformations	3	...	...	3	15
Premature Birth and Debility	19	...	...	19	186
Atrophy	22	2	...	24	248
Age	...	...	35	36	459
Sudden	5	2	...	7	92
Violence, Privation, Cold, and Intemperance	7	2	3	12	213
Causes not Specified	2	...	1	12	49

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	July 13, 1850.	Sum of Ten Weeks.
London...	1948369	781	8860
West	301189	118	1378
North	376568	161	1607
Central...	374199	128	1659
East	393067	171	1845
South	503346	203	2371

The following is the number of Deaths occurring from some of the more important special causes :—

Apoplexy	29	Heart	19	Phthisis.....	116
Bronchitis	29	Hooping-cough ...	23	Pneumonia	42
Cholera	7	Hydrocephalus ...	26	Scarlatina	23
Childbirth	5	Influenza	...	Small-pox	9
Convulsions	27	Liver	16	Stomach	6
Diarrhœa	37	Lungs.....	4	Teething	11
Dropsy	7	Measles	16	Typhus	30
Erysipelas	2	Paralysis	18	Uterus	5

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	662	395	267
Females	637	386	251
Total.....	1299	781	518

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M. Calm.	General Direction of Wind. P.M. N.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·681	57·4	52·8	— 4.0	A.M. Calm.	P.M. N.	Miles 150	0·30	Nothing was shown at any examination.
Monday	29·855	56 4	45·6	— 4·5	W. & N.	N.	90	0·01	Nothing was shown throughout the day.
Tuesday.....	29·845	56·7	47·4	— 3·9	W.	N.W.	130	0·20	Nothing was shown throughout the day.
Wednesday.	29·922	58·0	45·7	— 2·7	N.	N.W.	85	0·01	Positive, and tension strong during the afternoon.
Thursday ...	29·945	59 7	55·9	— 1·3	Calm.	Calm.	25	0·00	Positive, and tension strong during the afternoon.
Friday	29·946	63·6	56·5	+ 2·3	Calm.	E.N.E.	40	0·00	Positive, and tension strong throughout the day.
Saturday ...	29·900	64·8	52·8	+ 3·2	Calm and N.E.	N.E.	45	0·00	Positive, and tension variable throughout the day.
Means ...	29·875	59·5	51·0	— 1·5	N.		SUM 565	SUM 0·52	

* In this Column, A. stands for Active : N. for Negative; and P. for Positive.

Mortality in the City of Durham.—From an interesting statistical table of the mortality in the above city, for the five years and three months ending the 31st of March, 1848, it appears that the total of deaths in that period were :—Male, 818; female, 812: 1,630; of these, 242 are attributable to consumption—males, 139; females, 103. The average duration of life in the whole town is 31 years; the average age at death of all who die above 21 years is 53; the average age at death of all who die under 21 years is 3; the rate of deaths from consumption is 14·76; old age, 12·56; convulsions, 7·32; scarlet fever, 2·74; water on the brain, 3·73.

TO CORRESPONDENTS.

The receipt of books, pamphlets and newspapers, letters, and other communications are acknowledged from Mr. Ebsworth, of Bulwell; Dr. Ranking, M.D. Cantab., "Half-yearly Abstract of the Medical Sciences." Pp. 356. London. 1850.—Dr. Lankester, "Correspondence of John Ray." Pp. 502. London. 1848. "Memorials of John Ray." Pp. 220. London. 1848.—Mr. Braithwaite, "The Retrospect of Medicine." Pp. 492. London. 1850.—Mr. Horne, "The Poor Artist." Pp. 234. London. 1850.—Metcalfe and Company, "Eighteenth Annual Report of Blind Asylum at Massachusetts." Pp. 94. Cambridge, United States. 1850.—Dr. Howe, "Second Report on Idiocy." Pp. 72. Cambridge, United States. 1850.—Mr. Huguenin, "Treatise on Physical Education." Pp. 75. Liverpool. 1850.—A General Practitioner, Hull; Mr. Sayle, Surgeon to the Norfolk and Lynn Hospital; Mr. Marshall, Assistant-Surgeon to University College Hospital; Mr. Munckton, of Curry Rivel; Dr. Epps; Dr. Manson, Physician to the Farringdon General Dispensary and Lying-in Charity; Mr. Michael, of Swansea; Mr. Gray, "The Development of the Retina and Optic Nerve, and of the Membranous Labyrinth and Auditory Nerve Reprint from the Philosophical Transactions." Part I. 1850.—Mr. Jasper Rogers, "Peat Charcoal and Sanitary Reform." Pamphlet. Pp. 15. London. 1850.—Dr. James Turnbull, of Liverpool, "An Inquiry how far Consumption is Curable; with Observations on the Treatment and on the Use of Cod-liver Oil, and other Remedies." Second Edition. Pp. 107. London. 1850.—Dr. James Bird, "The Types of Delirium Tremens." Pamphlet. Pp. 30. 1850.—Dr. Ewing Whittle, "The Symptomatic Treatment of Asiatic Cholera." Pp. 100. London. 1850.—"English Churchman Newspaper," of July 4.—Dr. Snow, on the "Fatal Cases of Inhalation of Chloroform; Reprint from 'Edinburgh Medical and Surgical Journal." Pamphlet. Pp. 15. Edinburgh. 1849. And the "Discussion respecting Chloroform in the Académie de Médecin of Paris; Reprint from 'London Journal of Medicine." Pp. 4.—Mr. Birkett, Assistant-Surgeon to Guy's Hospital, "The Diseases of the Breast, and their Treatment." (The Jacksonian Prize Essay for 1848.) Pp. —. London. 1850.—Mr. Gibson, of Ulverstone; Mr. C. R. Walsh, "Parish Maps and other matters, a Letter to the Parochial Authorities." Pp. 8. London. 1850.—Dr. A. P. Stewart, Dr. Camps, An Apprentice to a Surgeon, Dr. Knox, Dr. Gondret, of Paris; Mr. Campbell, late 55th Regiment, M.D., of Bath; Mr. Van Voorst, "History of British Reptiles." By Thomas Bell, Sec. R.S., &c., illustrated by fifty wood engravings. Pp. 159. London. 1850.—"Introduction to Conchology; or, Elements of the Natural History of Molluscous Animals." By George Johnstone, M.D., LL.D., &c. Pp. 614. London. 1850.—Mr. Thomson, "A Practical Treatise on Diseases Affecting the Skin." By the late Anthony Todd Thomson, M.D., &c. &c. Completed and Edited by Edmund A. Parkes, M.D., Professor of Clinical Medicine in University College. Pp. 440. London. 1850.—Mr. Moir, of Musselburgh, near Edinburgh, "Lunatic Asylums (Ireland.) Abstract of Return to the House of Commons, dated Feb. 26, 1850."—Mr. Cripps, President of the Society of District Medical Officers, Liverpool; Mr. Haynes Walton, "Thirteenth Lecture on Operative Ophthalmic Surgery."—Mr. Ancell, "Second Lecture on Blood Diseases."—Professor Owen, "Nineteenth Lecture on the Generation of the Invertebrated Animals." Mr. Alfred Emson, of Dorchester; M.D., an accoucheur of long experience, but now no longer in practice; Mr. Edwin Lee, "The Baths of Rhenish Germany; with notices of the adjacent Towns." Pp. 133. London. 1850.—Dr. Hutchinson, Assistant-Physician to the Hospital for Consumption and Diseases of the Chest; Dr. Wilks, of Camberwell; Mr. Battye, of Pimlico; Mr. Brainsford, of Haverhill; Mr. Henry Smith, of Caroline-street; C. J.; An Apprentice; Sir George Ballingall, M.D., Professor of Military Surgery in the University of Edinburgh, "Introductory Lecture to his Course." Pp. 8. Edinburgh. 1850. (Reprint from "Monthly Journal.")—Mr. George Shaw, of Durham, "Statistical Table of the Mortality of Durham."—Q. in the Corner; Mr. Harvey, of Soho-square, "On Excision of the Enlarged Tonsil." Pp. 121. With engravings. London and York. 1850.—Dr. Blair, Surgeon-General of British Guiana, "The Yellow Fever Epidemic of British Guiana." Edited by John Davy, M.D., F.R.S, Inspector-General of Army Hospitals. Pp. 161. London. 1850.—Mr. Thomas D. Hawker, of Edward-street, Portman-square, (next week); Dr. Bushnan, "Cholera and its Cures; an Historical Sketch." Pp. 175. With Meteorological and other Tables. London. 1850.—Mr. Raynes, of Grindley-on-the-Hill, (next week); A Man in the Moon (inadmissible.) Mr. Ogden Fletcher, Dale-street, Manchester.—Mr. Thos. F. Clay, of Strafford, Essex, (we hope next week;) Mr. Postgate of Driffield; X. Y. (will perhaps be more explicit;) Mr. Wright, Surgeon Aurist, of Duke-street, St. James's.

Kousso.—The Editor of the "Medical Times" would confer an obligation by informing the inquirer how the new drug Kousso is supposed to act in the expulsion of tape-worm, the "entire animal" being said to be expelled after the short interval of "three hours" from the exhibition of the remedy.

*** It is said, though we will not vouch for the facts, that parrots are poisoned by parsley; pigs by pepper; fowls, dogs, and foxes by sweet almonds; why, then, may not the tape-worm be poisoned by Kousso? The different effects of different substances on different animals are very remarkable, and well worthy investigation. Thus it is said that fowls are uninjured by darnel, and pheasants by stramonium; hogs thrive on henbane; storks, sheep, and goats on water-hemlock; the wolf takes white arsenic, and the horse corrosive sublimate with comparative impunity. As regards the action of Kousso, its anthelmintic properties rest at present

entirely on experience. "There is nothing in its botanical character nor its chemical composition that can throw any light on its *modus operandi*." It is, however, a mild astringent, containing about 24·4 per cent. of tannic and gallic acids, but it can scarcely be said that its peculiar action on the worm is dependent on these; for, if it were so, many others of its class (Rosaceæ) would act in a like manner. Besides the above, it also contains about 6·25 per cent. of a bitter acrid resin; this may, perhaps, be one of the physiological elements of its composition, but we say again we cannot prove it to be so. The physiological action of Kousso is not very great; sometimes it excites a sense of heat in the stomach and mouth, followed by nausea, or even vomiting; it generally acts slightly on the bowels, but not so much as to be considered a purgative. It is obvious, therefore, says Pereira, that the efficacy of Kousso as an anthelmintic does not depend on its purgative or evacuant influence, but on its poisonous or toxic action on the worm; in fact, it is a true vermicide.

Our New Series.

[To the Editor of the Medical Times.]

Sir,—Allow me to congratulate you on the very improved appearance of, and intrinsic value of the articles contained in, the present Number of the New Series of the "Medical Times." If the succeeding numbers equal the present specimen, you certainly need not fear comparison with any contemporary hebdomadal medical journal.

In my very limited circle of medical friends I will certainly do what I can to recommend it; but this will be hardly necessary, as an inspection of the Journal itself must commend it to the support and admiration of every unprejudiced person.—I am, Sir, &c.,

Hull, July 11, 1850. A General Practitioner.

*** Our readers will, perhaps, pardon the vanity that induces us to publish the above. We have selected it at hazard from many others, expressing similar sentiments. It is very gratifying; and it is with the utmost satisfaction that we are enabled to say, that we have not received one letter of disapprobation.

C. J.—We do not for a moment suppose that the French law will permit any man to practise as a surgeon and retail drugs. The French law is remarkably jealous of any such amalgamations.

An Apprentice.—In Medicine, Watson's Practice; Botany, Henfrey's Work; Chemistry, Fownes's Manual; Algebra, Professor de Rayer's Work.

Mr. Thomas Brown, Surgeon, of Castle Donnington.—There are various ways which men adopt to make the world acquainted with their existence. Some are honourable, and depend on the exercise of talent; others are of a less respectable character. Until now we were not aware of the existence of Mr. Thomas Brown, surgeon, of Castle Donnington, who presumes to charge us with a want of faith in the publication of Mr. Wardrop's Work on the Heart, and thus informs us of his existence and place of residence. He may be a very important man in his own estimation,—young men sometimes are,—but certainly not in that of others. His assumption may answer in the humble and limited sphere in which he moves; there it may pass for talent, and impose on the ignorant; but he must not imagine it will impose on us or the world at large. Such men should learn to know, and to keep their place. A study to be unknown often displays tact and sound judgment. But as he seems to be ambitious of a wider notoriety than that he has obtained, we will lend him our assistance to make him known through the length and breadth of the land, as Mr. Thomas Brown, surgeon, of Castle Donnington! and we may add, for aught we know, a lineal descendant of the Brown we all recognise, as belonging to the firm of "Smith, Brown, Jones, and Robinson."

So far from being chargeable with a want of faith in the publication of this work, we have done all that we could to urge its completion. It was our interest that it should be completed as speedily as possible. We were not the writers of it, we were only the media of its publication; and therefore, on what ground does this man presume to pen his blustering remarks, charging *us* with want of faith? If he be a subscriber to a well-known "Medical Dictionary," which yet remains unfinished, though its completion was promised ten years ago, he has, no doubt, sent many of his elegant epistles to the respectable publishers of it, *complaining of* their *want of faith!* He evidently cannot discriminate between right and wrong,—justice and injustice; and it is this consideration that induces us to treat him leniently.

We stated in the Number of this Journal which concluded our twenty-first Volume, published on the 29th of last month, that we had received an intimation from Mr. Wardrop, that he had nearly brought his work on the Heart to a close, and we added, as soon as the MS. is put into our hands, it shall be printed, and the sheets remain at our publishers, to be supplied, on application, to our subscribers.

Advertisement Extraordinary.—At Home Eight Hours Daily.—General Medical Practice, or the New and Suitable System adopted by G. T. Hayden, Physician and Surgeon, 82, Harcourt-street, Dublin, Bachelor of Arts and Medicine, Trinity College, Dublin; Licentiate and Ex-fellow of the Royal College of Surgeons in Ireland; late Lecturer on Operative Surgery in the Original School of Medicine, Peter-street, Dublin; and Surgeon to the Anglesea Hospital. Rules.—Dr. Hayden prescribes for Patients at his Residence from 8 to 9 a.m., 11 to 4, and 8 to 10 p.m. Terms.—Medical or Surgical advice, and Medicine, (compounded by a Licentiate Apothecary,) for Five Shillings, at 82, Harcourt-street (East Side,) or in the immediate city, when consulted by letter, (Medicine or Prescription included,) Ten Shillings.

*** A Correspondent has forwarded to us the above advertisement, from the "National Advertiser," of June 16; and, if the titles which Mr. Hayden has attached to his name really belong to him, we hope the authorities of Trinity College will see if it be not in the power of their Corporation to inflict some punishment or stigma upon him for so gross a breach of professional etiquette. Medical corporations are powerless in these matters, but Universities can generally exercise, directly or indirectly, some jurisdiction over their graduates, and it would be a public disgrace to Trinity College to permit a man who appears to be both a Bachelor of Arts and of Medicine to resort, uncensured, to such disreputable and quackish proceedings.

The *Rev. Dr. Willis Mosely*, we are informed, is (?) of Cambridge University, not of the University of Cambridge—a difference as wide as that between a horse chestnut and a chestnut horse. We understand he *was* a Dissenting Minister in Northamptonshire; with what sect he is now connected, or if with any, our correspondent does not know. This, however, is certain, he does not belong to the Establishment as some readers may have supposed.

Obstetric Student.—Velpeau rejects the Hunterian doctrine that there is a uterine portion of the placenta; Professor Owen, on the contrary, contends, that the placenta is composed of materials, part of which belong to the mother and part to the ovum. He says, after careful examination of the Hunterian preparations, "I believe they all fully bear out Mr. Hunter's general view, that the maternal blood is diffused, by means of the tortuous arteries, into the spongy cellular substance of the placenta, where it bathes the capillaries of the fœtal circulation, and is returned by the oblique decidual adventitious sinuses and channels into the orifices of the uterine veins."

French Weights.—We have more than once given the equivalents, and we will now repeat the table:—

The French kilogramme = 15,433·6 grains, or 2·679 lb. troy, or 2·205 lb. avoirdupois.

The gramme	=	15·4336 grains.
The decigramme	=	1·5434 ,,
The centigramme	=	·1543 ,,
The milligramme	=	·0154 ,,

M.R.C.S.—It is perfectly true that some members of the College in Lincoln's-inn-fields sign themselves M.R.C.S.L. instead of M.R.C.S.E., or Eng., and the alleged reason is their unwillingness to identify themselves with the collegiate authorities, who accepted, if they did not seek, the ever infamous Charter of 1843. M.R.C.S.E. is an uncertain title,—it may mean England or Edinburgh. We prefer the metropolitan signature.

Mr. W.—We shall be glad to have the reports if carefully taken, but would rather publish them with our correspondent's name attached, as a guarantee for their faithfulness. We have no desire for concealment, nor, as long as a man acts honestly and uprightly, need he desire it.

A Country Surgeon.—Turpentine, and the bark of the root of the pomegranate, have been hitherto chiefly relied on in cases of tænia, but the Kousso seems to be far superior to both in medicinal value. Turpentine, besides, has the disagreeable drawback of occasionally causing toxic symptoms, besides which, strangury, bloody urine, and even nephritis have resulted from its absorption.

Mr. Jones.—Ever since February, 1848, the date of the last Revolution in France, the French medical journals have appeared with the greatest irregularity. It may be some time yet ere their publication is resumed with so much spirit as to ensure their appearance at their proper stated periods. The proprietors of several of them have experienced a great falling off in their subscription list. In this way, as well as in others, revolutions impede the progress of literature and science.

We trust very shortly to find space for the valuable communications of Dr. King, Dr. Sheridan Muspratt, Dr. Dickson, of Jersey (with two wood engravings), Dr. Roe, of Plymouth, Mr. Hunt, Dr. Laycock, of York, Dr. Lightfoot, Mr. Marson, Mr. Milton, Dr. Waller, on Placenta Prævia, Mr. Curtis Hugman on subcutaneous incision for wry neck.

Nepos.—Next week.

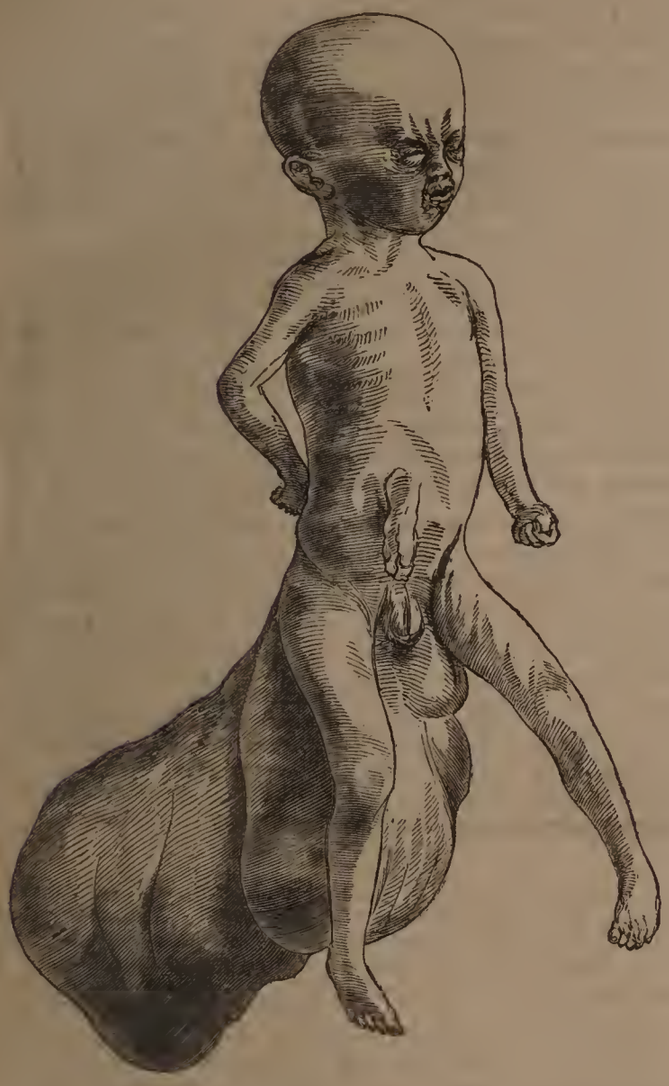
Contractility of the Human Spleen.—The contractility of the human spleen has now been satisfactorily proved by Harless. A criminal was decapitated at Munich on the 18th of May, at five minutes to ten; at a quarter to eleven the body was taken to the amphitheatre. The voluntary muscles contracted strongly under the influence of galvanism. The spleen was now exposed, isolated on a piece of glass, and touched with a galvanic pole, the other pole being inserted into the spinal cord; every time the pole touched the spleen an undulatory contraction occurred after some seconds. The observation was made also, that the yellow spot of soëmmerring in the eye was not seen immediately after death, but appeared to form gradually. One eye was excluded from the light, but it formed here also.

Dr. Buckland, the Dean of Westminster,—the eloquent and learned writer of the remarkable "Bridgewater Treatise,"—is bereft of reason, and is now an inmate of an asylum near Oxford.—*Era.*

ORIGINAL COMMUNICATIONS.

CASE OF MONSTROSITY.

By Dr. DICKSON,
Jersey.

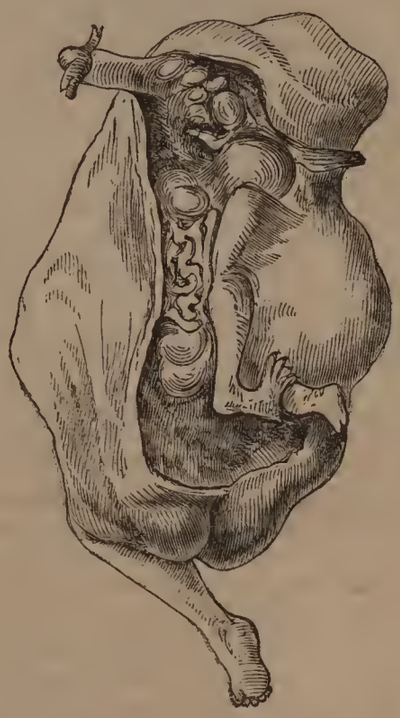


Thinking the accompanying sketch of a strange monstrosity may be interesting, I append the particulars, trusting they may be deemed worthy of the *Medical Times* and a space in that widely circulated journal.

I was sent for at one a.m. of the 14th Jan., 1850, to attend a Mrs. M., of her fourth child, she having been previously delivered of three healthy, full-grown children. She stated, that she had been suffering for several days previously from pains, which she attributed to cold and fatigue, as she had had some heavy washing, she being then only seven months advanced in pregnancy. A change had, however, taken place four hours before, which rendered it necessary to send for me. On making an examination *per vaginam*, the only thing felt was an enormous bag of membranes, occupying the whole pelvic cavity, which ruptured on being touched, and discharged a very large quantity of fluid, which literally deluged the bed. When this had subsided, I again made an examination, and felt the head of a small child in the cavity. The pains continued very trifling for about three-quarters of an hour, when the head emerged, and was not, as might be expected, followed by the rest of the body. On examining to find the cause of detention, I discovered that it depended on a firm, elastic tumour, which I at once concluded was dropsy of the abdomen. The patient, however, had two very severe pains, which expelled the child, a female one, and which lived for about a quarter of an hour. There was retention of the placenta. I should add, that in passing the os externum, a slight rupture of the tumour took place where it was connected with the spine.

On examining the morbid appearance, it was found to consist of a tumour, with two clearly-defined portions; the anterior having a slightly lobulated appearance. The vagina was well-marked, and anus pushed anteriorly. On making an incision into the anterior portion, a large quantity of clear serum escaped, together with an irregular, soft, spongy mass, which had evidently been floating in it. The walls of the cavity were found to be very thick, as well as the septum dividing it from the posterior cavity.

The upper portion of the posterior cavity was thick, soft, and spongy, marking clearly the outline of a placenta; all trace of the umbilical vessels and cord was, however, lost. On laying this cavity open, a red-coloured serum escaped, and the rudiments of one, if not of two children, were brought to view, as seen in the subjoined sketch.



The first object that presented itself was an irregular mass, more like a scapula than anything else, and running along its upper part, and closely adherent to it, was what appeared to be the arm, with the different articulations, terminated by the rudiments of a hand with four fingers. In juxta-position with this was what appeared to be a foot with two toes. At the extremity, corresponding to the head of the humerus, was a small projection, which, on examination, was like another hand with four fingers, though very imperfectly developed. Beyond this again was a clearly-defined thigh, leg, and foot—the latter with two toes—and terminated at the os calcis by a short, sharp, bifid, and spur-like projection. There were also seen several convolutions of intestine, great and small. Besides this, and as it were lining the walls of this cavity, were found many other smaller cysts, each filled with serum, analogous most probably to different parts of the body.

The accompanying sketches (for which I am indebted to my young friend Mr. P. Larbalestier) will no doubt explain the various appearances. The several limbs (if such they may be called,) were all of different sizes, and apparently had not been arrested in their growth at the same period.

I leave it to the ingenuity of your readers to account for this monstrosity, (if possible,) only adding, in conclusion, that I have shown it to three of our oldest practitioners here, who never remember having seen anything even approaching to this strange freak of nature.

St. Helier's, Jersey.

PRACTICAL OBSERVATIONS ON THE DISEASE USUALLY CALLED PUERPERAL FEVER.

By Dr. THOMAS LIGHTFOOT,
(Formerly Consulting Surgeon to the Nottingham Union Hospital.)

(Concluded from page 466, Vol. XXI.)

It must, I think, be conceded to Dr. Gooch, that by far the most important point in the consideration of any disease is the treatment. It is to improve this that all scientific efforts tend, or should tend. Now, what ought to be the treatment in puerperal hysteritis? Should it be uniform, in all cases and in all epidemics? or should it vary according to circumstances? I have endeavoured to trace the disease uniformly to a local origin, to an inflamed and diseased uterus; but this gives us no positive information as to how the disease should be treated. The malady does not resemble any of the other simple inflammations of the vital organs or their membranes; it occurs in persons who at the time are peculiarly constituted, and it obeys the laws of epidemics, as if it were an essential fever, not originating in a local cause. The treatment, then, remains to be considered; for it is not enough to say, as some have thought, "the uterus being inflamed, how much blood will be required to be taken to cure the patient?" This practice has failed, signally failed, as well as most others. There is nothing in medicine more unsatisfactory than the history of the treatment of puerperal fever; it is painful to go over the contradictions, from Denman and Dr. William Hunter and Professor Hamilton, who thought that all, or nearly all, would die, (do what you would,) to others, men of sanguine temperaments, who promised recovery to all, by adopting their mode of treatment. Even Dr. Gooch seems to have thought that most might recover by gentle and judicious treatment. There is one thing certain, that "by no means hitherto discovered, can the frequent and fatal occurrence of the disease be prevented in lying-in hospitals, and that the loss of human life thereby occasioned, completely defeats the objects of their benevolent founders." (a)

I incline to the opinion, that there are three distinct stages in the disease: a preliminary or congestive one; an inflammatory of a rapid and fatal character follows, accompanied by typhoid symptoms, rapidly placing the patient beyond all hopes of recovery. The indications, then, to be fulfilled, in the first stage of puerperal hysteritis, presuming that the disease may be so viewed, is to calm and tranquillize the nervous system, to unload the local congestion, and propel the blood through the overcharged viscera to its wonted channels. With this object, a dose of opium should be given, say a draught composed of forty minims of the tincture, with 1-16th of a grain of antim. tart. As soon as the effects of this remedy become manifest, (usually in about an hour after its exhibition,) the patient should lose at least twelve ounces of blood, the good effects of which should be kept up by the local application of leeches to the hypogastric region. The extent to which the bleeding is to be carried must, at all times, be a most important matter for the consideration of the practitioner.

Fomentations, or, what is preferable, linseed-meal or hot bran poultices, should be applied from the commencement of the early symptoms. The external application of turpentine I have invariably used, in preference to blisters; its effects being more rapid, and very frequently it has been followed by relief from pain.

The characteristic symptoms of inflammation should never be lost sight of by the practitioner; the line of demarcation between morbid sensibility and early inflammation requires an observant eye. The good effects of morphia, however, have been observed in both stages of this affection, and, when we have reason to fear its existence, calomel should be combined. A quarter of a grain of the acetate of morphia, with one grain and a half of calomel, should be given every two hours, until the mouth becomes affected, or until the inflammatory symptoms have subsided.

The object we have in view in the administration of mercury is to remove the congested and inflamed state of the vessels of the peritoneum, as well as to give tone and contractility to vessels of the deeper tissues; also to prevent the termination of the complaint in effusion of sero-purulent fluid. The good effects of the internal exhibition of turpentine have been extolled by Dr. Douglas and others, and I have myself observed its beneficial action in cases of a *pseudo*-peritoneal character; but I very much question its suitability and utility in the true inflammatory form of this disease.

Immediate removal, if possible, of the patient from the room in which the disease occurs, cannot be too strongly recommended. Emetics have also been employed; but of these I have had no experience: the symptoms must be attacked as they arise, and combated accordingly.

The injection of warm water into the vagina and cavity of the uterus, medicated with a solution of the chloruret of soda, in the proportions of one drachm of the latter to two ounces of the former, used night and morning, will be attended with the greatest advantage, by removing offensive matters and soothing the organ itself; strong purgatives have been recommended, and active purgative enemata; but many eminent physicians are distinctly opposed to this treatment.

In Dr. Billing's opinion—and in that he is not singular—opium may occasionally supersede the lancet; but it would be hazardous to offer an opinion on this important point until the numerical method of inquiry be fairly and honestly applied to this disease.

In the adynamic or typhoid condition of this disease the object is to restore the strength of the nervous system and rally the sinking powers of life. Ammonia, wine, quinine and bark must be had recourse to; fluid nutriment, such as beef-tea and mutton-broth, must also be judiciously administered.

In the lying-in wards of the great hospital at Birmingham, the healthiest town in Britain, we are told by the late Dr. Ingleby, that every woman seized with puerperal fever died. It was nearly the same in the lying-in hospital of Edinburgh, situated in the healthiest part of the town. In London, whatever was the treatment, the mortality has always been most serious. It is the same in Paris; so that, on the whole, the attention of the profession must ever be given to prophylactics rather than active means, the latter not being neglected. My professional brethren will gather, from the preceding brief remarks on this unsatisfactory matter, that I lean to the treatment recommended by Dr. Gooch; that is, to the milder treatment, and to the early employment of narcotics.

CONCLUSION.

Is puerperal hysteritis contagious? Can it be communicated to the puerperal woman by infection? And, if so, what is the process, and whence comes the infecting matter?

Physicians have been at all times accused of being too theoretical; so that the instability of "theory in medicine" has passed into a proverb, "Medicine is a conjectural art."

And no doubt it is. It is not a science in the strict sense of the term, nor ever was; but, were it disjoined altogether from scientific inquiry, it must lose its status, sink in character, and become wholly empirical. Thus it is that the rightly-educated and right-thinking physician aims constantly at the maintaining this valuable link intact—the link between medicine and philosophy; and it was the re-establishing that link previously broken between surgery and science, on which the vast reputation of Hunter is mainly based. But the theoretical part of my subject I mean to discuss very briefly; my object being to address those of my medical brethren who have enjoyed opportunities of extensive practice.

Of the various questions of a theoretical character in connexion with this disease which may here be discussed, the most important perhaps is that of contagion and infection. By contagion I mean the possible extension of puerperal fever from one person to another, both occupying the same or adjoining wards; by infection, I mean the conveyance of some morbid poison from the body of one patient to another directly by the hands of the accoucheur, or by the nurse, provided she acts as an accoucheur; lastly, there is a minor question, which may, I think, be disposed of summarily; it is this:—Can puerperal fever be excited in any woman, by being merely handled by a person engaged in the dissecting-room; or who has recently been engaged in *post-mortem* examinations of a woman who had died of puerperal fever, or of any other malignant disease? Now, I feel disposed to say, that sufficient data have not been collected to prove this last theory or conjecture, call it by what name you will. It is true, lately at Vienna, as we learn from a valuable communication by Dr. Routh, the question has been agitated; it is

(a) Dr. R. Lee.

the same question which engaged Dr. Campbell and others in Edinburgh in 1822, with a hope of arriving at something more definite. It would seem that there are two lying-in hospitals at Vienna;—so much the worse, no doubt, for humanity;—in one of these hospitals, it was observed, the mortality in 3000 was 500; whilst in the other it amounted to no more than 40;—a truly frightful statement, and which, under a well-governed country, would have led to the instant suppression of one if not both of the hospitals. But the paternal Government of Austria thought otherwise; they appointed a Commission, who discovered that too many students attended in the first hospital, and they had the courage to reduce the number of attending students from forty to thirty! This bold measure having no effect in diminishing the mortality, they next fancied that men-midwives were rougher in their handling than women are, although the contrary is known and admitted all over the world. Whilst this is going on in the public hospitals of Vienna, I cannot learn the state of private practice in the Austrian capital. All this happened in 1844, 1845, and 1846; in these years they were debating the same questions in Vienna as had occupied the profession in Britain, and more especially in Edinburgh, Dublin, and London, in 1822. The Vienna Commission does not seem to have been aware of this. They arrived, however, at the conclusion, that the disease originated neither in contagion nor infection. Dr. Routh, to whom we owe the history of what probably was an epidemic, views the disease as an endemic, and thinks it contagious. The Commission came at last to the resolution, that the disease was caused by cadaverous matter derived from the bodies of persons who had died of typhus and other low fevers, of erysipelas, &c., and conveyed and so applied to the genital system of puerperal women by the hands of the attending students or male attendants. They observed, or thought they observed, that midwives did not convey this putrid matter to their patients, as they studied merely on the lay figure. They further directed that neither the students nor accoucheurs should make *post-mortem* examinations. In process of time the epidemic ceased, and the mortality in both hospitals lowered, and became equalised.

The symptoms which characterised the Vienna epidemic of 1844, 1845, and 1846, (for I feel disposed to think it one,) were precisely similar to those we find everywhere else. So also were the appearances after death; there was speedy decomposition, and the blood was liquid and very dark. But, with great deference to the intelligence of the Commission, it does appear to me that they left the great evil just where it was, namely, the hospital open to receive, on the appearance of some future epidemic, which is sure to come, another 3000 lying-in women, of whom it will consign to death another 500.

This, I fear, is the history of medicine: we benefit not by the experience of the past, or at least not sufficiently.

Dr. Gordon, of Aberdeen, thought the disease contagious. It raged epidemically in Old Aberdeen, but never extended to the New, although distant only half a mile. Some have thought that the essence of the disease consists in a disordered hæmatosis; others ascribe the uterine phlebitis, which is only sometimes present, and does not therefore constitute the essence of the disease, to certain oval orifices in the uterine sinuses remaining open after the separation of the placenta, and thus placing a large portion of the inner surface of the uterus in the condition of an abraded or wounded part. By these open orifices, it has been conjectured, (for all is conjecture here,) that putrid matter passes into the veins of the uterus, and hence into the general system of the veins; or that inflammation may arise from other causes around the orifices of these open veins or sinuses. But the existence of these oval orifices of the uterine sinuses having been amply and fully refuted, both by Continental and British anatomists, this theory falls to the ground.

Do congestive, inflammatory, and typhoid conditions follow each other in quick succession in this fatal malady? Some practical facts seem to bear this out. Nor does the circumstance of the remedial means differing so widely from each other,—as widely, indeed, as the Poles are asunder,—militate seriously against this idea.

The question seems to be, what can arrest the congestive or first condition? In some parts of Britain, it has been effected by early bloodletting; others succeed with opium and warm fomentations; others with turpentine enemata. These contradictory methods of treatment may, after all, be more seeming than real. But an important point like this must be left to the discretion of the medical attendant. Epidemics also differ in their nature; and this may happen in puerperal hysteritis, as well as in others. A great point in the treatment of this disease must ever be the isolation of the affected.

Inflammation of the veins, and absorbents of the uterus, affecting more or less the surrounding tissues, are probably present in every case of this disease; with these, I think, the other tissues sympathize. In the northern part of this island, the depleting practice has met with most supporters; rheumatism and erysipelas were there also treated by active depleting measures.

It is well known that such, if they succeed there, fail in the south of England. But, even in the north, Professor Hamilton, whose practice and experience far exceeded that of any other accoucheur in Scotland, was always averse to active depleting measures in puerperal fever, and, I have reason to think, uniformly condemned them.

Those who trace the symptoms to the absorption of putrid matter, strongly recommend change in the position of the lying-in woman. This, effected with care, cannot do harm in any case, and may be attended with benefit.

During one epidemic, it was found, that all who were bled died. This took place in the eastern part of London. The mortality was 11 of 13 attacked. Let us hope, that the profession will not cease their labours until some more satisfactory results be obtained. It is recorded of Mr. Hey, of Leeds, that at first he tried the stimulating plan, and lost 11 out of 14. He next resorted to blood-letting and the depleting system, losing now only 3 out of 33. But it is common for epidemics suddenly to lose their fatal character towards the close of the epidemic; and this, no doubt, happened to Mr. Hey. He was practically unacquainted with the pathology, not having himself examined a single fatal case.

In my third communication I mean to call the attention of the profession to a subject which has recently attracted the highest attention. I allude to malposition of the unimpregnated uterus; to its effects, physiological and pathological, on the general health of woman and functions of the generative system; its connexion with local and constitutional irritation; and, lastly, to the remedial means, whether mechanical or otherwise, as known to, and at present practised by, the professors of our art.

Keppel-street, Russell-square, May 20, 1850.

KOUSSO.

EXPULSION OF THE ENTIRE TÆNIA, ONE HOUR AND A-HALF AFTER THE EXHIBITION OF THE REMEDY.

By Dr. INGLIS,
Halifax.

As the following case is, perhaps, the first in the provinces in which the kousso has been tried, and, as the results accord so perfectly with those described as having been witnessed in the Hospice de la Charité and the Hôtel-Dieu, its insertion in the *Medical Times* may not be without interest to the profession.

July 18, 1850.—Elizabeth Smith, aged 56, residing at No. 2, Carrier-street, Halifax, states, that for some years previous to 1840, she had suffered from indigestion, as evinced by the usual symptoms; that in the early part of that year, the pain and uneasiness, from being general, became more fixed in the umbilical region, accompanied by a constant aching pain in the small of the back, and a frequent sense of extreme faintness. That, in March, 1840, she had taken a largely-diluted dose of Epsom salts, which, operating violently, brought off in the evacuation a portion of tape-worm fifteen yards in length. After this there was a temporary cessation of pain; but, at the expiration of a fortnight, five yards more of the worm, unexpectedly, and without the aid of medicine, were ejected. From that time, till within the last two years, portions of tænia, varying from half a yard to seven yards in length, were expelled, either by the use of remedies or by voluntary effort. That the more acute symptoms have, within the last two years, gradually diminished, but that there has been the almost daily voidance of from six to twenty detached links of tænia, generally in the evacuations, but that not unfrequently portions protruded themselves, even when she had been passive or in a state of rest.

The appetite has been capricious, never ravenous; and the bowels throughout have been regular, although rather inclining towards relaxation.

The usual remedies have been administered, in a greater or less degree, during a period of ten years, and still there continues the daily discharge of portions of the worm, some of which have this day been examined by myself and my friend Mr. Bramley, with whom was last entrusted the treatment of the case.

The several portions of the tænia, when voided, have hitherto been alive.

July 19.—The dose of kousso, having been infused for a quarter of an hour in twelve ounces of hot water, was taken at three separate draughts, an interval of five minutes elapsing between each, at a quarter past eight o'clock a.m.

The patient having taken the kousso as directed (fasting), a slight degree of nausea was induced, which, however, was soon relieved by a cup of weak tea, without either sugar or milk, and a little toast.

Slight griping pains were felt in the bowels at a quarter past nine o'clock; and at half-past nine o'clock there was a free, liquid, and dark evacuation, in which floated many detached portions of tænia. At ten o'clock, another large, dark, liquid motion brought with it the entire remaining portion of the tænia, the head and neck separated from the body, and the body, six yards in length, divided into unequal lengths. Neither portion evinced any symptom of life, as the segments previously voided had done.

A seidlitz draught was ordered in the afternoon, and a lavement of hot water to be used before going to bed.

July 20.—The bowels were frequently moved yesterday after the seidlitz-water, and the lavement was only retained about five minutes. The patient expresses herself this morning as perfectly free from pain; the bowels have been freely evacuated, but not the slightest trace of tænia could be discovered in any of the discharges since the voidance of the entire worm at ten o'clock yesterday morning.

P.S.—The kousso used with so much success was obtained from Messrs. Savory and Moore, of Bond-street.

Halifax, July 20.

THE DECOMPOSITION OF CHLORIDE OF SODIUM

BY ACETIC ACID IN THE PRESENCE OF ALBUMEN,

OR THE COAGULATION OF THE ALBUMEN OF THE SERUM IN THE PRESENCE OF ACETIC ACID AND A CERTAIN AMOUNT OF CHLORIDE OF SODIUM.

By Dr. E. A. PARKES,

Professor of Clinical Medicine in University College, and Physician to University College Hospital.

I have been unable to find any notice of some facts which I have lately observed, and which are of interest in a chemical point of view, and possibly also may have physiological and pathological applications.

If the undiluted serum of the blood be strongly acidified with acetic acid, no change results, or a very slight haze is produced. If large fragments of chloride of sodium are now dropped into this fluid, the following changes occur. Almost immediately the sharp angles of the salt disappear, the fragment increases in size, and becomes rounded in form, from the deposit upon its surface of a coating of albumen. Slight agitation dissolves both the coagulum and the salt, and the serum becomes as before, perfectly clear. If the particles of salt are very small, the solution occurs so rapidly, that the albuminous deposit can scarcely be observed. The addition of a little more salt re-induces the same phenomena of deposit of albumen and subsequent re-solution. After a certain amount of salt has been added, the serum becomes incapable of dissolving the albuminous precipitate; and this condition of things occurs, provided the acidity be considerable, when the percentage of the chloride of sodium is very moderate. The albumen thus precipitated is not affected by acetic acid, or by caustic potash, added at once to the solution, but is soluble in water. If chloride of sodium be now added to saturation, the whole of the albumen is thrown down, and the liquid, which can be filtered off the precipitate, gives no indication of albumen, or the very merest trace. The filtering is more readily accomplished, if the fluid be diluted by adding a little strong solution of chloride of sodium, or, what is the same thing, a little water, not sufficient to dissolve the excess of chloride of sodium which has been added.

The explanation of these changes appears to be, either that in the first place the presence of another acid permits the hydrochloric acid to manifest the strong affinity it has for albumen, which consequently coagulates round each particle of salt; and, secondly, that the compound thus resulting, which is so soluble in water, is perfectly insoluble in a moderately strong solution of chloride of sodium, or it may be supposed, that the combination of acetic acid and albumen, which is soluble in water, (like the combinations, under certain conditions, of hydrochloric and nitric acids with albumen,) is insoluble in solution of chloride of sodium of a certain concentration. The first explanation appears more probable, but some experiments, which need not be detailed now, on the action of acetic acid on serum, apart altogether from the influence of hydrochloric acid, or of chloride of sodium, support, in some measure, the last supposition.

The rapidity and perfection with which these changes occur depend upon the strength of the acid, and upon the quantity of chloride of sodium, and possibly, also, may be affected by the percentage of albumen; although I am not at present able to speak perfectly on this last point. The amount of foreign acid present seems to be a very important point. If the quantity of acetic acid which is added, be so small as to give a just perceptible acid reaction, a good deal of salt dissolves without any precipitate; and it is not till a considerable amount has been added that the deposit occurs, and then apparently this is partial and imperfect only; whereas, if the acetic acid be added in larger quantity, the deposit occurs at once, and the quantity of chloride of sodium necessary to be added is inconsiderable. Thus, some limpid serum, which analysis in the ordinary way proved to contain 66 per 1000 of coagulable matter, insoluble in alcohol and water, (after coagulation,) being very feebly acidulated with acetic acid, nearly 24 per cent. of common salt was added before the liquid became very turbid, and then the turbidity, though manifestly greater than that which would have been produced by the salt alone,(a) was infinitely less than was produced by sharply acidulating the same serum, and adding only 5 per cent. of chloride of sodium.(b) It would, therefore, appear that, though a feeble acid may, under certain circumstances, cause the coagulation of the albumen, yet that a strong acid does so much more perfectly.

Chloride of sodium is not the only salt which causes, under the circumstances now noted, the coagulation of albumen. The chloride of potassium, as might be supposed, acts in the same way, so do the sulphates of potash and soda, the nitrate of soda, the sulphate of magnesia, and probably other salts. On the contrary, no precipitate can be obtained with acetate of potash and acetic acid. Other acids may be substituted for the acetic. Thus hydrochloric acid added to moderate acidity gives no precipitate; or, according to the strength of the acid, gives a precipitate which is redissolved, the addition of chloride of sodium immediately producing the albuminous deposit.

It is an interesting point that the common phosphate of soda (2 atoms of fixed base) not only gives no precipitate by itself, or with acetic acid, but appears to a certain extent to dissolve that given by the chloride of sodium. Thus, if

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(a) The effect of chloride of sodium, and some other neutral salts, in producing (when added to saturation) a white precipitate in the serum of blood, was first noticed by Dr. Buchanan, of Glasgow. (Proceedings of the Glasgow Phil. Society, March, 1845.) The precipitate thus produced is comparatively small in amount. Dr. Buchanan named this matter provisionally "pabulin," from the notion that it was immediately derived from food; but, from an experiment on himself, he afterwards concluded that it existed also in the serum, drawn after twenty-four hours' fasting. Although I have not yet succeeded in absolutely proving it, I think this substance is albumen; and, if so, it affords another instance of the remarkable influence of chloride of sodium on a strong solution of albumen such as exists in serum. A portion of albumen seems to be deposited when chloride of sodium is added in excess. A little water dissolves the precipitate, and the saturation of this water with salt again precipitates it. Some other salts, as sulphate of soda, act even more powerfully in this way.

(b) These rough numbers are, of course, merely given as examples, or approximative averages, to indicate the point in question. In the serum in question the amount of chloride of sodium normally existent in it was not determined, as the experiment was one merely of comparison.

phosphate of soda be first added to saturation, (a) and then acetic acid and the chloride of sodium, the proportion of the latter necessary for complete precipitation is greater than when no phosphate is present; yet no amount of phosphate of soda will prevent the coagulation when the chloride of sodium reaches a certain amount.

Whether these or analogous chemical changes occur in the animal system, and, if so, under what conditions, is a point on which it would be hazardous to express at present any opinion. It is very evident that the amount of chloride of sodium normally present in serum (viz., from 3 to 6 per 1000 parts) would not permit deposition from this cause even in the presence of the strongest acids; and that, if serum containing the whole of its salts and albumen were to exude into the tissues of the body which have so strong an acid reaction, and, although such normal acidity were heightened by the presence of a foreign acid, (as very possibly may be the case in various diseases,) yet no coagulation of albumen, in the manner here supposed, could occur, so long as the serum remained in its ordinary state of dilution. At least this is to be concluded from such elements of the problem as are at present known to us. Yet it is equally evident, that, if such exuded serum could undergo concentration in any way, then, (in spite of the dissolving influence of the phosphate of soda,) with a rapidity and perfection proportioned to the strength of the acid with which it was in contact, and to its own concentration, it must inevitably coagulate. It is not difficult, with the observations of Liebig before us, to suppose that in certain tissues there may be a free acid, such as the lactic, capable of effecting such a transformation; but it is not so easy to conceive how serum, even supposing it to be poured forth, under the influence of pathological states, with the usual proportions of its component parts, could become concentrated. Whether the water could, in any way, diffuse away from the solids it previously held in solution, is a point which may possibly be hereafter cleared up by those extraordinary researches of Mr. Graham, which promise to throw so much light on various points in physics.

In some normal conditions, it is almost necessary to suppose that concentration of serum must occur from evaporation,—as, for example, in the case of the skin. If it could be proved that the serum exuded from the capillaries of the skin, (as is believed by many,) and then, being concentrated by the vast loss of liquid from the surface, came in contact with an acid, as seems not impossible, considering the acidity of the perspiration, a more or less complete coagulation must necessarily result.

These are mere speculations, which I should not have brought forward, even in this guarded way, were it not that the universal diffusion of chloride of sodium, which points to some very important function, the ease with which, in the laboratory, albumen is deposited in its presence, under given conditions, and the singular alternation of acid and alkaline fluids, which is found throughout the economy, render it not impossible that the chemical facts, mentioned in this paper, may be worthy the attention of physiologists.

CASE OF PLACENTA PRÆVIA.

By Dr. CHARLES WALLER,
Obstetric Physician to St. Thomas's Hospital.

The following case of partial placental presentation occurred in the latter part of the past month, and, I regret to say, terminated fatally as regards the mother: the infant is living and hearty.

Case 39.—Mrs. C., aged 31, of a nervous and excitable temperament, had been the subject of frequent miscarriages and had been singularly unfortunate in her former confinements, (four in number.) Twice the shoulder presented, once the vertex, and once the feet. Twice there had been adhesion of the placenta with hæmorrhage; only two of her children had been born alive. About two months ago I was requested to visit this lady, who was then in the country. She had been alarmed by the sudden discharge of a considerable quantity of blood, which had, however, ceased before my arrival at her residence. She had experienced during the day occasional pains, so closely resembling the true parturient pains that her medical attendant and myself considered her labour was advancing. On examination, however, it was found that no progress had been made; the undeveloped cervix was easily felt. The finger could, without difficulty, be passed through the os uteri, and the membranes ascertained to be presenting, no portion of the placenta being within reach. She was directed to keep herself in the recumbent position, carefully to attend to the state of her bowels, and patiently to await the result. I heard of her from time to time, but did not see her again until Friday, June 28th. On visiting her at this time, I found her in rather an excited state, with a rapid pulse. Slight labour pains had been experienced for about three hours. There was no hæmorrhage, the discharge consisting of mucus merely tinged with blood. The os uteri was very little dilated, although dilatable. On making a careful examination, a portion of the thin edge of the placenta was felt posteriorly, whilst the membranes alone could be felt anteriorly, the presentation of the child being natural. The pains continued, at irregular intervals, for about four hours, when a fearful gush of blood took place. Under the circumstances of the case, I determined to deliver instantly, without waiting for a second irruption of blood. Turning was effected with unusual facility, and a fine, healthy, living child speedily born. The placenta quickly followed, and the hæmorrhage ceased. I remained in the house for a couple of hours, but as the uterus remained firmly contracted, and there was no bleeding, I then left.

On the following day, June 29th, there appeared to be no peculiarly alarming symptom. The pulse was rapid and feeble, but this symptom was to be expected after the sudden loss of blood: the patient said that she felt "very well." There had been few after pains.

June 30.—Experienced a slight "creeping sensation" along the spine, which was followed by great vascular reaction; the pulse rose to 140; there was intense headache with heat of scalp and other signs of febrile commotion there was also great pain in the uterus, and pressure upon the abdomen beyond a certain extent could not be borne. Small doses of hydr. c. creta, with pulv. ipec. comp., were ordered to be given every two hours, and the abdomen to be constantly fomented. The pain soon subsided, but a degree of fulness was complained of.

July 1.—As there had been no alvine evacuation, a few grains of rhubarb with carbonate of soda were administered, which produced a copious dejection, which appeared to be productive of much comfort, the patient expressing herself as being greatly relieved; the pulse had fallen to 120, and as nourishment could be taken, and retained on the stomach, I entertained a confident hope of ultimate recovery.

July 2.—Took an opiate last night, which procured five or six hours refreshing sleep; the pulse, however, is more accelerated; there is a feeling of faintness and slight tympanitic distension of bowel.

July 3.—Much the same; no improvement in the pulse.

July 4.—More exhaustion; the pulse very quick and powerless; has no pain; tympanitis increased. A turpentine injection was thrown up, which brought away much flatus, by which some relief was felt.

July 5.—Exhaustion increasing; pulse very rapid; still retaining food; has asked for chicken and a little porter, which were allowed her. Of this, however, she took very little. During the night the unfavourable symptoms increased; there were involuntary discharges of urine and fæces, and, on the 6th July, in the afternoon, she expired.

Finsbury-square, July 10, 1850.

(a) In all these experiments it is necessary to avoid adding water, as water itself produces specific changes on the albumen.

SUBCUTANEOUS INCISION FOR WRY-NECK.

By W. CURTIS HUGMAN, Esq.

In the *Medical Times* of June 22, I observe, "The subject of wry-neck, and its cure by division of the sternal origin of the sterno-mastoid, was brought under the notice of the Dublin Surgical Society at one of its last meetings." A somewhat similar case to that given by Bellingham has recently occurred in my own practice, the particulars of which I forward to you for insertion in your Journal, should you think it worthy of a place. Miss W., aged 14 years, was brought to me for my opinion respecting an old-standing and confirmed shortening of the right lower extremity, the consequence of diseased hip-joint. The heel of the affected

side was elevated from the ground about four inches, anchylosis had taken place between the femur and ilium, causing considerable lameness and deformity, which had not been compensated for, as is usual in such cases, by the high-heeled boot. Three years since, when the abscess ceased to discharge, and the more urgent symptoms had subsided, she was allowed to take walking exercise, and imperceptibly acquired the habit of carrying her head very much bent forward, the chin inclining to the right side, until at length the angle of the jaw of the left side was nearly in a right line with the sternum; the head was fixed in this manner, and could not voluntarily be rotated, and the crown of her bonnet rested upon the left shoulder. Upon examination I found that the sterno-mastoid muscle of the left side was contracted into a hard cord, and projecting in a very unsightly manner. I at once suggested that the division of this contracted muscle would, in all probability, cure what had latterly become a much more unsightly deformity than the contracted lower extremity, and requested my friend Mr. Henry Smith to visit the case with me. The following day, May 20, he kindly assisted me at the operation, which was the simplest possible proceeding. A narrow knife was inserted under the skin flatwise, about half an inch above the sternum, and the edge turned upon the muscle, the divided ends of which parted asunder fully half an inch; a few fibres of the cervical fascia were then divided, and the head could at once be freely rotated. A piece of gutta percha was moulded to the shape of the neck and worn for a month in the form of a collar, for the purpose of keeping the head erect. Six weeks have now elapsed since the operation. The tendon has perfectly united, a deposition of lymph at the divided part still causes some prominence of the muscle; but there is now no deformity; the head and neck can be freely moved in all the natural directions, and the chin points to the median line. I need not add that the parents are much pleased with the result.

I beg to state that the above case differs from that reported by your Dublin Correspondent in this respect:—That in my case the clavicular portion only of the muscle was affected, whilst in the case referred to by him the sternal portion of the muscle was contracted.

19, Great Ormond-street, July 10, 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

TUBERCULAR INFLAMMATION OF THE BRAIN.

THE structural changes in the brain and its membranes, which are usually described under the title of acute hydrocephalus or tubercular meningitis, although so common in early life, are of comparatively rare occurrence after childhood. For this reason, the ensuing case, in which the disease occurring in the adult was closely watched through all its stages unto death, and the changes in the various organs subsequently examined with considerable care, may be deemed worthy of the space it occupies.

Patrick L.—, aged 35, an Irish labourer; admitted May 17, 1850, under Dr. Burrows; John, back ward 6. Aspect very languid; expression vacant; eyes heavy, yet glistening; conjunctivæ congested; pupils contracted; cheeks flushed; head rather hot, especially when contrasted with the general surface, which is below the natural temperature. No rash or vesicles; pulse 60, soft, moderate volume and power; tongue moist, pale, coated with a thin white fur; no thirst, appetite indifferent; bowels said to be relaxed; some uneasiness on pressure over the lower part of the abdomen; urine voided naturally. He speaks low; complains of constant severe pain all over his head; light and noises are disagreeable to him; pressure over the eye-balls causes pain. When he shuts his eyes, as if to sleep, the lids only half cover the balls. He has slight cough, but auscultation detects nothing amiss beyond some smallish crepitations at the lower part of one lung behind, which vanish after the first full inspiration. The severe headache has been almost constant for three weeks, but for several weeks previous to its onset the man was out of health, and was treated for cough and pain in the side. Yesterday he was bled from the arm, and in the evening was light-headed. At present his intelligence is good, and his answers, though slow, are coherent and correct.

The supposition naturally suggested by the aspect, the abdominal tenderness, and the rumoured looseness of the bowels, and supported by the history, that here was a case of simple continued fever, failed in support, from the condition of the circulation, as indicated by the cool skin and slow pulse, and from the absence of eruption. Although the diagnosis was thus obscure, yet there seemed sufficient local disturbance in the head to warrant the direction of treatment to that part. He was accordingly ordered eight leeches to the temples, a cold lotion to the head, and two grains of calomel at bedtime.

18th.—No material relief followed the application of the leeches. He was noisy and delirious in the night, but became at once quiet when remonstrated with, and regretted the disturbance he had made. He lies in a heavy, languid state, with his eyes half closed, moaning and complaining bitterly of his head, but is quite rational. Face rather flushed; ears cool; no undue heat of head; conjunctivæ congested; skin generally cool and moist; no rash; pulse 48, very soft; tongue clean anteriorly, a white, moist fur behind; no thirst; takes his food; bowels not acted; abdominal pain on pressure remains. Passes urine.

It was now determined to treat the case as fever, and the languid state of the circulation, indicated by a soft pulse of only 48, required that this treatment should be of a stimulating kind. He was therefore ordered a saline draught, consisting of acetate of ammonia and camphor mixture, with half a drachm of aromatic spirit of ammonia, every six hours; four ounces of port wine, and a pint of beef tea daily; to continue the cold lotion to the head, and to take half an ounce of castor oil.

19th.—Had another restless night, delirious, and complaining of pain in the head; bowels acted twice very copiously; evacuations natural, but rather light coloured. No material change in his general condition, except that the pulse has risen from 48 to 72. He relishes the wine and water, and thinks it does not make his head worse. He is quite rational, but speaks slowly. Ordered to continue the same treatment.

20th.—Again restless all night, but less delirious. Aspect very languid; pain in head no better; face flushed; ears cool; no particular heat about head; eyes still half open; conjunctivæ congested; skin warm, soft; no rash; pulse 68, soft; tongue moist, and white at the sides, a broad, dry, brownish streak down the centre. Bowels not again open. There is decided increase of abdominal pain on pressure. He is stupid and heavy, and answers slowly but rationally. Takes his food readily.

A blister to be applied to the epigastrium; in other respects to continue the same.

21st.—Another noisy delirious night; no sleep; pain in head unabated; lies in a heavy stupid state. No material benefit having thus resulted from the plan of treatment pursued for the last three days, and the symptoms indicative of mischief within the skull being unrelieved, and evidently still in progress, it was now determined to resort to active remedies directed to these symptoms. He was, therefore, ordered to be cupped to six ounces from the temples, and to take two grains of calomel and one-sixth of a grain of potassio-tartrate of antimony every six hours. The wine and beef-tea were stopped, but the saline and ammonia draught continued.

22nd.—There was no relief from the cupping; he became even more stupid and heavy after the operation; no sleep in the night, but though restless he was not noisy. He now lies in a half-comatose state, will not answer when spoken to, and can scarcely be induced to protrude his tongue. He is constantly moving his hands about, picking and pulling at any object he touches. The right-hand and arm are occasionally agitated by subsultus. The eyes are turned up, the lids leaving the greatly-congested globes exposed; no strabismus; pupils moderately dilated; face flushed; no undue heat of head, ears cool, skin cool, moist. Pulse 56 soft,

thrilling; no motion for two days; urine voided in bed; no distension of bladder.

Ordered to have his head shaved, and a blister applied to the nape of the neck; to take the calomel without the antimony, and to have a dose of castor-oil.

23rd.—The blister rose well; he was quiet in the night, but probably only because half-comatose, as he now is; conjunctivæ less congested; in other respects his appearance is unaltered. He can just be roused to show his tongue, but makes no attempt to speak. Pulse 72, soft, thrilling.

A blister was ordered to be applied to the head, half a drachm of strong mercurial ointment to be rubbed into the groins every six hours, and the calomel pills to be continued.

24th.—No material change; lies in the same state; pupils contracted; no strabismus; occasional spasmodic twitching of muscles of face; pulse 92, soft, thrilling; no mercurial action; the blister rose. No change in the treatment.

25th.—He was in constant restless agitation of the limbs all night, and continues so now, occasionally a little convulsed. Is quite unconscious; has not spoken for three days. Pupils contracted; no strabismus; features shrunken; occasional risus sardonicus; teeth covered with sordes. Pulse 72, soft. In this state he continued until evening, when he died.

On examination of the body, nineteen hours after death, it was found not much emaciated; a bloody fluid was escaping from the nostrils; the congestion of the conjunctivæ had disappeared. Rigor mortis considerable. The skull was thin and brittle; the scalp congested behind; dura mater congested; longitudinal sinus empty; fluid blood in the lateral and other sinuses. Pia mater congested; arachnoid over the cerebral hemispheres remarkably dry and sticky; the convolutions much flattened, the interspaces being quite obliterated. At the base, the arachnoid and tissue of the pia mater were infiltrated with an opaque yellowish-white material, and in the midst of this thickened tissue could be discerned numerous minute glistening semi-transparent granules. Similar granules were scattered over the arachnoid covering various parts of the cerebrum and cerebellum, yet, owing to their minute size and semi-transparency, they could be detected only after careful examination. They existed also, in larger size and greater distinctness, along the arachnoid lining the base of the skull, and were rather thickly strewn over the serous surface of the theca of the spinal cord. The substance of the brain was much congested, and deficient in firmness and elasticity. The cerebral ventricles were distended with turbid, whey-like fluid, much of which escaped at the base on removing the brain; the whole quantity might be about ʒiij. The cerebral substance around the lateral ventricles was softened to an extreme degree, being quite diffluent, while flakes and shreds of it floated in the fluid contained in the ventricles. The septum lucidum was quite broken down, scarcely a trace of it remaining. The superficial layers of the corpora striata, and other central ganglia immediately bounding the ventricles, were reduced to the consistence of thick cream; the deeper layers were more consistent, yet much softer than natural, especially on the left side. The softened brain-substance was of its natural colour. The lining membrane of the ventricles was not thickened, but was finely roughened by minute glistening particles, similar to those noticed on other parts of the arachnoid of the brain and spinal cord. This granular condition was observed also in the fourth ventricle, and along the passage of communication between it and the third. The membranes of the spinal cord were healthy, except for the granular condition of the arachnoid. The cord itself presented an extreme degree of white softening, especially at its upper part, which was reduced quite to a pulp. With the exception of presenting an early stage of fatty degeneration, the heart was healthy; the pericardium, however, presented on its inner surface a few minute semi-transparent granules, similar to those in the arachnoid. The blood was fluid in all parts examined; and some collected in a vessel had not set in half an hour after exposure. Larynx and trachea healthy; old pleural adhesions on both sides. The lungs were, in every part of their tissue, studded with miliary tubercles, some greyish and semi-transparent, others more opaque and yellowish-white: they were all distinct, isolated granules, though often closely aggregated. The pulmonary tissue generally was much congested: in many places quite ecchymosed. Numerous minute tubercular granules were scattered over various parts of the peritoneum, but were most abundant along the under surface of the diaphragm, on the folds forming the ligaments of the liver, and on the layers passing from the diaphragm towards and over the spleen and pancreas. In these situations they were closely aggregated, and were, for the most part, opaque and yellowish, and the peritoneum about them appeared somewhat inflamed. In the great omentum, the granules were less numerous, more transparent, and closely resembled the glistening particles noticed in the arachnoid: very few existed in the mesentery, and none were observed along the inner surface of the abdominal parietes. The liver was of natural size and colour, but its tissue was densely and uniformly studded with minute, grayish-white tubercular granules. Similar granules existed abundantly in the spleen, which was rather large, soft, and of a dark reddish-brown colour. There was an appearance of similar granules in the substance of the pancreas also, but the colour of the natural structure of the gland rendered their existence in this organ doubtful; they were thickly strewn, however, over its peritoneal surface. One or two of the same granules were here and there imbedded in the substance of the deeply-congested cortex of each kidney. In the small intestine, near the ileo-cœcal valve, were several small, shallow, tubercular ulcers in the situation of Peyer's glands.

Although cases of tubercular affection of the brain similar to the above are, as I have said, comparatively rare, yet the details of four, closely parallel to this, are given in M. Louis's work on Phthisis,(a) and the particulars of another case are recorded by M. Andral.(b) To the first of these authorities I may refer for the best account of the subject. The earliest, most prominent, and constant symptom, in all the cases, was severe headache, ensuing in persons who had previously exhibited general signs of phthisical tendency, and usually accompanied with vomiting. This headache and vomiting, together with a peculiar, vacant, bewildered expression of the features, characterising what M. Louis calls the first stage of the disease, the duration of which, he says, varies from three to twelve days, are succeeded by a period of restlessness, with gradually increasing obtuseness of the senses, and then by a third and last stage, distinguished by complete unconsciousness and fatal coma. In these several stages of the disease, in the phenomena characterising each, and in the morbid appearances detected after death, the identity between cases of this kind and the ordinary acute hydrocephalus occurring in children is rendered complete.(c).

Apart from its general bearings, the case I have just narrated presents several special points, which seem to call for a few remarks. Practically, we, perhaps, can learn from it little more than how utterly powerless remedial agents seem to be in arresting the progress of the disease, or in checking the tendency to death, which, when once fully established, it seems invariably to manifest. In this case, as in those detailed by Louis, depletion, whether local or general, failed to effect the slightest diminution in the headache, and whatever other plan was adopted, the disease seemed to pursue its course towards a fatal termination, apparently as uninterruptedly as though no treatment at all had been employed. This fatal tendency, in defiance of remedies, which is equally observed in children, is, perhaps, ascribable in some measure to the general cachexia* which obviously exists in individuals in whom such an extensive and general deposition of tubercle takes place. For it is not unusual to find, as in this case, nearly every organ of the body the seat of tubercular deposit; and the early stage in which the tubercles are usually found, would seem to indicate that the system was overpowered by the first violence of the disease before it had begun to suffer from the effects of the metamorphoses naturally undergone by tubercle sooner or later after its deposition.

The extension of the disease to the spinal cord, in this case, is worthy of note. The extreme softening observed, especially in its upper part, was evidently of the same nature as that in the central parts of the brain, and doubtless originated in the same morbid condition. In parallel cases, by other writers, I do not find any mention of the cord being examined.(d) I observed an exactly similar state of the cord in a child who died with

(a) Sydenham Society's Edition, p. 280, e. s.

(b) Clinique Médicale, tome v., p. 108.

(c) In Dr. West's Lectures on the Diseases of Children will be found a good account of the morbid anatomy of acute hydrocephalus.

(d) See, however, Dr. Ormerod, in the *Lancet*, Vol. II., 1846, p. 471.

the general symptoms of acute hydrocephalus, and whose brain and other organs presented the ordinary state of tubercular disease found in such cases. In this case the child was said to have lost the use of its legs for a week before death. In the case of the man no such paralysis seemed to exist; but it might be a question how far the general muscular twitchings and other spasmodic movements observed during the last three or four days of life was connected with this affection of the cord. Besides the softened state of the cord, it has been mentioned that along the smooth interior of the theca, a finely granular appearance existed, similar to that on the lining membrane of the cerebral ventricles. I noticed the same appearance on the arachnoid of the child's cord just alluded to, and also in another case since examined. It may be out of place here to inquire into the real nature of the granular condition so frequently met with in the cerebral ventricles, and how far it may be due to different causes in different cases. The subject will probably be returned to on another occasion; for the present, it may be observed, that in the several fatal cases of tubercular inflammation of the brain which I have examined after death, the close similarity of the fine granules on the interior of the cerebral ventricles to many of the small semi-transparent tubercular granules strewn on the surface of the peritoneum and other serous membranes, seemed to leave no doubt of their all owning the same origin, and being of the same nature.

The abdominal pain on pressure, noticed on the patient's entrance into the hospital, and for several days afterwards, may claim a single remark. Both this and the rumoured looseness of the bowels, which complicated the case, and favoured the supposition of its being fever, were due, no doubt, to the tubercular disease existing in the peritoneum, the small intestines, and most of the other abdominal organs. The much greater abundance in which the tubercular deposit had taken place along the under surface of the diaphragm, and over the peritoneal folds proceeding from it, and which probably produced the epigastric tenderness, leading to the application of a blister on the 20th, has been observed in most of the cases in which I have found the peritoneum, in common with most other organs of the body, the seat of early and rapid deposition of tubercle.

In the next communication other cases, more or less analogous to that just commented on, will be brought under notice. W. S. K.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

HIP-JOINT DISEASE TREATED BY COD-LIVER OIL.

Several cases of morbus coxarius, in this hospital and in Guy's, improving under the use of cod-liver oil, seem to me of very practical importance, and demand a few passing remarks. The mere mention of this disease cannot fail to recal to every practitioner, months and years devoted to some unmanageable case of the sort, in which he has stood the brunt of all sorts of opinions as to his skill,—in which all his trouble, possibly, has been rewarded by some other "skilful lecch" stepping in when a cure was nearly effected, taking all the glory on himself, and persuading everybody that his particular method was the one true and great catholicon.

There is, perhaps, no class of diseases that exhibits the staid, thoughtful hopefulness of the surgeon, and the vagaries of the quack in such brilliant colours, as the diseases of the joints I allude to. The instrument-maker, too, has his unfailing apparatus, which, like one drop of the balsam of Fierabras, is to make everything new in less than no time. How many patients are doomed to these Procrustean beds it irketh me to say; but if there is one disease more than another in which a sound opinion is necessary, and quackery to be avoided, it is that under review.

Of the early history of morbus coxæ it is not necessary to say a great deal; as well observed by Sir Benjamin Brodie, our wisest plan is to unlearn much that we have learned, and see merely what our advancing knowledge, and perhaps our negative experience teaches. There is no part of the body more frequently diseased than the joints and their synovial cavities. Fluid in a joint, I need scarcely say, has a great resemblance to fluid in other serous cavities. Other diseases of the joints are not dissimilar: there is no mystery in the thing but what we have ourselves tried to weave about them. Sir Benjamin Brodie's immense experience, together with that of other surgeons, is against the idea of the local origin of these diseases,—a host of constitutional causes, and among them rheumatism, gout, mercury, scrofula, &c., playing a most essential part. This it is very important to bear in mind. *Morbus coxæ* is now correctly thought to be merely indicative of defective bodily powers, and even taking blood with leeches at its commencement is often attended with evil. Sea air, tonics, more especially the mild proto-salts of iron given for a long time with occasional intermissions, and cod-liver oil, are the means now chiefly trusted to in London, and generally recommended. The air of hospitals in large cities is a very inferior substitute, of course, for that of the sea-beach; yet, with even this disadvantage, it is of no little practical interest to know how well the cases seem to do under cod-liver oil. Several cases in this hospital, under Mr. Solly and Mr. Green may be instanced.

The following cases will illustrate the mode of treatment:—Frederick Edridge, aged five years, under the care of Mr. Solly. His history is the following:—He was received on the 1st of this month. Last Christmas he strained his right hip: it was exceedingly painful at first, not so much so on his presenting himself at the hospital. The dispensary surgeon, where the child's friends reside, said he could do nothing for him while an out-patient. Lives in the New Kent-road. He lies on the sound side, with the knee bent, but can straighten it with very slight pain. On jarring, the limb has acute pain; knee and hip, in short, present all the usual signs of morbus coxæ; is feverish and thirsty. Ordered a little simple medicine.

July 4th, issue introduced. Ol. jecoris aselli 5i. ter in die. Has been ever since going on quite well. Pain removed.

Henry Harris, aged 5 years. Ill two months; says it came of itself; has a strumous look; light complexion; can give no account of himself; a sharp jerk gives him pain in femur and knee; no fever. Much the same as the previous case; distinct morbus coxæ in its first stage. Issue made over the hip as in previous case, and ordered a drachm of the oil three times a-day. 15th.—Seems quite another person, going on most favourably.

Thomas Moxley, aged 16; admitted 12th February, 1850. A fortnight before his foot slipped going down stairs, and he fell with his leg under him; pain in the knee and hip set in soon after; complained of all the usual symptoms of diseased hip. Ordered moxæ, ol. jecoris aselli, and little else; went out well.

It would be easy of course to give the history of several of these cases. I am more anxious to point out the general indications of cure. Once quite clear as to the disease we have to treat, absolute rest will be indispensable, and for this purpose the patient should be put on one of Earle's beds, his dress made so as to disturb him in the least possible way, and the greatest attention paid to his general bodily comfort, so as to prevent restlessness. A good deal will depend of course on the particular time the patient is seen. When the disease is advanced, with abscess, I need scarcely say recovery seldom occurs. We can look for nothing better than anchylosis, and even this may take years. If the patient is to be treated in the earlier stages of the disease, we can do a great deal to bring about a permanent cure without any such result; in both, however, absolute rest will be essential, and a long sojourn in hospital.

Among the poor these cases are very common, and, need I say, often very unsatisfactory. The earlier and more manageable symptoms, in the vast majority of cases, are overlooked. The child limps, and the limb begins to dwindle. A pain in the knee, made much of and petted, disguises an inflammatory condition of the hip, and when the case is brought to hospital all but incurable disease is found to exist,—need I go on with the melancholy tale,—years and years are necessary for anything like a cure. Received into hospital, better diet and rest at first work a change for the better; the case improves; after the lapse of a few months, however, the atmosphere of the hospital and the constant lying down begin to tell,—he gets worse,—his parents take him home—he falls a prey to old women and quacks, who work some specific miracle in his behalf—the air of his own street or alley now proves worse than the hospital to which he returns worse than he left it. Everybody must lament this, and the great

want in London of an hospital, specially adapted to these cases,—their name is Legion. In puncturing abscesses about the hip-joint, great care must be taken; all kinds of rude or rough surgery avoided; and the abscess allowed to empty gradually. Where anchylosis is all we can look for, much devolves on the surgeon in keeping the limb in the best position; for the patient, if left to himself, will infallibly bend it at a right angle. The proper position is of course that of the thigh bent a very small degree forwards,—the limb will be not only thus more useful, but less probability is incurred of its getting on the dorsum of the ilium. A simple gutta percha splint, embracing one side of the pelvis, about half the circumference of the thigh, and extending below the knee, is all the appliances necessary. When there is great pain, a seton or blister will be found useful.

As to the rationale of the *modus operandi* of cod-liver oil in this disease, perhaps the best way of explaining it, is by saying it changes that abnormal molecular condition of the blood so well known to exist in these cases, and so often connected with scrofula and other constitutional causes. To say there is ulceration of cartilages in some of the worse cases, as we long ago thought, would of course be at present a little heterodox. Cartilage under the microscope has no vessels, and consists essentially of true cells, as was long since shown by Schwann, and in this country by Mr. Toynbee; but that *diseased* cartilage is not vascular, is possibly open to doubt. Softening of the cartilage of the hip-joint is not uncommon, and forms, perhaps, one of the earlier states of the disease under inquiry. The cells become enlarged, softer, and contain nuclei; chondrin changes into gelatine—these changes being preliminary to what we will call ulceration—that scrofula, syphilis, rheumatism, often produce these changes is also very probable. Mr. Birkett and others explain these changes, I need scarcely add, by saying, "disintegration" takes place, in which the development of fat plays no unimportant part. In this observation, we do not, perhaps, get rid of the difficulty; and may ask, with Sir Benjamin Brodie, whether ulceration, in whatever part of the body it takes places, is not essentially a process of disintegration, depending on a want of proper vital nutritive power. If this be the truth the operation of cod-liver oil is not such a puzzle. Iodine has not been found of as great use in so-called scrofulous disease of joints as iron—an idea which agrees with an opinion now gaining ground, that the former interferes with the proteine-forming power of the system, and is not the active principle of the oil—iron having an opposite effect.

STRICTURE OF THE RECTUM.

Among subjects of graver moment, this week, perhaps we may allude to the somewhat rare and very fearful operation —dividing stricture of the rectum—performed by Mr. Simon on Saturday. The case is one of no little interest, and has been under the eye of this excellent practitioner for the last two years. The notes of the case were mislaid; but in a conversation with Mr. Simon, he kindly furnished me with the salient points of the history. Eliza L., aged 30, married, came in on Thursday, 18th inst. She was under the care of Mr. Simon two years ago, since which she has been suffering under all the accumulating horrors of extensive disease of the lower bowel. Her sufferings have been so terrible, she has at length made up her mind to undergo the operation. From a cautious analysis of the previous history of the case, and from her having suffered from syphilis extensively, the most likely conclusion seemed to be, that the stricture arose from inflammation, probably of syphilitic origin, and not malignant; Mr. Simon's extensive pathological experience leading him to the belief, that there is little use in operating in malignant cases, which always end fatally. It is a somewhat curious fact, this disease is oftener met with in women than in men. The less malignant cases may be traced, possibly, to the popular abuse of purgative medicines. The morbid anxiety among females for "setting all right," by emptying the lower bowel, irritating that part, and preventing the healthy normal action of the contents of the colon. The disturbance of parts in childbearing must have, also, something to do in the matter, together with the inactive, sedentary life women lead, and the periodic all but inflammatory congestion of the parts in the pelvis at the menstrual epoch.

This young woman's history, for the last six months, has differed in nothing, except the existence of syphilis, from the general catalogue of cases of this kind. A sense of intolerable weight and obstruction of the bowels, little, if anything, relieved by the effort at evacuation, has been almost always present, distension and tormina of the upper parts of the bowels, pain in the vicinity of the sacrum and coccyx, with the tormina aggravated by tenesmus, rendering her life one continued scene of suffering. The lines on her face are those indicating great pain and suffering,—her whole appearance that of one much worn out. As usual in bad cases, the hæmorrhoidal veins have become engorged, and the cellular tissue about the lower end of the gut also extensively diseased; so that, together with piles, some of her recent symptoms would indicate the existence also of fistulæ. On examination before the operation, the stricture was felt very distinctly, impermeable to the end of the little finger, and very high up,—a point of corroborative interest in the diagnosis, *non*-malignant stricture being generally so situated, even as high as the sigmoid flexure, where it joins the rectum; the reverse, perhaps, generally obtaining in carcinoma, which is situated among the glands about the anus. The diagnosis, I need scarcely observe, of the nature of the disease in this case, required a great deal of care. Mr. Simon's long acquaintance with its history, however, left no doubt on his mind of its non-malignant character.

All the usual palliative treatment having failed out of hospital, Mr. Simon, on Saturday, advised the operation. The length of time, indeed, the system seems to bear up against this disease, is not the least of its peculiarities. Once it breaks down, it is a *facilis descensus* indeed; the patient gets worn out and emaciated,—purulent matter, of a scalding nature, comes constantly away,—the pulse gets small and intermittent,—the stricture, perhaps, ulcerates,—and the wretched patient is worn out. To avoid all this, the certain result of not operating, she was induced to make up her mind. Though her face exhibited much nervous anxiety and suffering, her general health had not, perhaps, given way.

Having been placed under the influence of chloroform, she was prepared for the operation. Placed on her face, the stricture was soon reached, the mere point of the finger getting into it, and giving rise to much mucous discharge, evidently high up; a grooved director was passed up to it, together with a bistoury. The director was next let fall out, and the knife carried through all the parts up to the coccyx. The operation is obviously of great extent; the lower part of the rectum being destitute of peritonæum, makes it, perhaps, less serious than it otherwise would be. The intestine above the point of stricture seemed quite free. The rectum was laid open, the muscular tunic, on division, resembling not a little the structure of the œsophagus. Two vessels, possibly branches of the superior hæmorrhoidal, spouted out pretty freely, and were tied; the fibres of the upper and lower sphincter were also visible. The thick mucous membrane with the stricture; the various veins and nerves all divided.

After the hæmorrhage had ceased, a large plug of lint was put into the wound, and secured by a T bandage. The chloroform began to lose its effect, and she was removed to bed.

The operation differs, only perhaps in extent, from that for fistula in ano; it is of interest, as differing from Amussat's operation for stricture of the rectum, which consists in cutting into the cavity of the intestine from above, and making an artificial anus in the groin,—a remedy little to be preferred to the disease. It is of interest, also, as exhibiting the resources of art in a disease not malignant, and when all other means seemed of no avail.

Much care is necessary, of course, in distinguishing stricture of the rectum. An enlarged or displaced uterus, or, in man, an enlarged prostate, may give rise to all the symptoms of this disease; sarcomatous tumours, not unfrequent in the rectum, should also be borne in mind; together with the long catalogue of malignant tumours to which this part of the system is specially liable, the latter form by far the largest proportion of diseases of the lower bowel, attended with stricture.

The whole length of the rectum, I may add, may be diseased, or two particular and distant points. We may have mucous and purulent discharges from the suppuration of piles, spasmodic contraction of the sphincter, and strangulation of piles; in all these the mode of operation will be different. Need I say, how many cases are aggravated by neglect; the mucous, cellular, and muscular coats all extensively diseased, the disease creeping steadily on, some other part of the system apparently engaged; many people dying of dif-

ferent intestinal affections, as they think, the disease, after death, found in the rectum.

As a case essentially of a practical character, indeed, I think the present one is worthy of our attention. After the operation, Mr. Simon ordered a large dose of opium, to allow the parts to rest. Since then the woman has been doing well, and no abdominal pain whatever.

The following day the plug was taken out—there appeared to have been no hæmorrhage.

26th.—Going on well, the bowels acting comfortably.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.
(Formerly House Surgeon to the Hospital.)

STRICTURE OF THE URETHRA,

INVOLVING THE GREATER PORTION OF THE CANAL—COMPLICATED WITH STONE — PERINEAL SECTION — SUBSEQUENT TREATMENT OF STRICTURE BY INTERNAL INCISION.

One of the most interesting and instructive cases which we have ever seen has been, during the last few months, under treatment at this hospital; and, as there has been of late so much discussion respecting the merits of certain measures which are adopted for the relief of stricture, both here and elsewhere, it will be well to give a report of such cases as may afford practical illustration of the value of the treatment which Mr. Fergusson puts in force under the various circumstances which are associated with these affections. The case which we wish to notice at present is one which is by no means frequently met with, and, as the treatment has hitherto extended over some months, the report must necessarily be somewhat lengthy, but it shall be condensed as far as possible, without the main and striking features of the case being omitted.

As far back as the beginning of April, the patient, who is a young, sickly-looking man, about twenty-five years of age, was admitted into the hospital under the care of Mr. Fergusson. He was in a condition which was much to be pitied. His urine was coming from his bladder in three different directions; rather, it was passed by three separate outlets. Only a few drops came away by the urethra whenever he attempted to urinate. The greater portion was evacuated through two artificial openings, one in the perinæum, the other in the abdominal wall, on the left side above the ilium. And from the latter it was emitted on voluntary exertion, in a complete jet, as from a fountain. A stricture commenced between two and three inches from the meatus, and apparently, from the thickening of the parts, extended all along the spongy urethra to the bulb. The patient was miserably weak and hectic, and in constant suffering from the irritability of his bladder, which caused him to rise every hour or two in the night. Besides the opening in the abdominal wall before mentioned, a large scar was observable just above the pubes. The explanation of all this will be found in the history of this case, which is as follows:—Two years since he fell from the rigging of a vessel, and came across a spar upon his perinæum. Great pain was caused immediately after the accident, but in a few hours it ceased; some slight swelling, however, soon came on. Nevertheless he continued at his work for a month afterwards, at the end of which period an attack of retention of urine took place, and continued for ninety-eight hours, when a surgeon relieved him by *puncturing the bladder above the pubes*. A canula was kept in the wound for six months after this, and during the whole time the patient only passed a few drops of urine by his urethra. Soon after the operation some leeches were applied to the belly, and two of the bites, one on each side, degenerated into fistulous openings, which allowed urine to pass through; that on the right side eventually closed up, but the one on the left has continued open ever since. At the time the bladder was punctured, *an incision was made through the perinæum* (rather into the perinæum), but nothing but pus was let out. Six months after, the water came away by this opening as well, and has been passing ever since. In such a state, then, as has been described, he was sent to Mr. Fergusson. This gentleman very carefully examined the urethra, and found that the smallest instrument was stopped about two and a half inches from the meatus, and that with great care it was impossible to get into the bladder through the natural passage without using force. It was very evident that the first thing to be done was, to get a free passage for the urine, the retention of which, and the constant irritation caused by its trickling through the three outlets, were telling so much upon the man's health. Mr. Fergusson therefore determined, after allowing some interval for the patient to recruit his health, to open up the perinæum freely, and pass an instrument into the bladder. Consequently, on Saturday, April 20, the man was brought into the theatre, placed in the position for lithotomy, and a free incision was made through the perinæum down upon the urethra. A short gum catheter was then with ease introduced by this wound into the urethra, and from thence to the bladder. Whilst Mr. Fergusson was doing this, he found out a new and unexpected complication; he felt the instrument strike against a hard substance; suitable instruments were obtained, and the foreign body was removed: it was found to be a calculus about the size of a nut. It appeared to have been formed in a sort of pouch; not in the bladder, but in front of its neck. A free opening thus having been made for the urine to escape, the patient was sent up to his ward.

For some days after this proceeding, the patient went on very well. The urine came freely away through the wound in the perinæum. No instrument, however, could be passed through the urethra. At the end of a week, he was somewhat suddenly attacked with unfavourable symptoms; he vomited; his skin became jaundiced, and he complained of great pain in the abdomen, more particularly over the seat of the liver; and, on examination, this organ was found to extend beyond its normal limits, and it was evident that the cause of his symptoms existed in an affection of this viscus. Some anxiety was entertained respecting the result of this attack, for upwards of a fortnight, as the patient became excessively depressed, and was unable to take much nourishment. By great care, however, the symptoms were removed, the inflammatory attack subsided, and there was so much improvement, that, on May 10th, Mr. Fergusson thought fit to begin to treat the stricture again. He endeavoured very patiently to introduce a small catheter, but he could make no impression, and, as there was considerable induration along the urethra outside, he applied the potassa fusa, at the point of a wax bougie, to the face of the stricture. The patient was enabled to take his nourishment well, which is chiefly fluid, beef-tea, wine, &c.

May 25.—This man has improved to such a degree that he is enabled to sit up; and, although his general health is still weak, he is much better than he was. The benefit which accrued to him from the operation of opening the perinæum is evidenced by the state of his bladder; there is much less irritability now that there is a free discharge for the urine. This opening has been kept patent by the introduction, from time to time, of an elastic catheter. Mr. Fergusson has not yet been able to get any instrument through the urethra; although he has repeated the potassa fusa two or three times, the only benefit which appears to have arisen from the caustic, is a partial removal of the induration outside the urethra.

May 29.—As there appeared no possibility of getting an instrument through the strictured portion of the urethra by ordinary means, Mr. Fergusson passed an instrument down to the stricture, and divided it pretty freely from within. This instrument is Mr. Fergusson's own invention; it consists of a grooved director, with a handle to it, and a long narrow knife with the cutting edge only at its very extremity. The blade is so narrow, and the groove in the director is so deep, that the cutting edge of the knife does not come into contact with the healthy part of the canal, but can be made to freely incise the strictured portion. Two days after this operation, a No. 2 catheter was passed right into the bladder with comparative ease.

June 6th.—Matters are going on satisfactorily. The opening in the abdominal wall has closed up; and, although he cannot pass his water by the urethra in a stream, it dribbles away quickly. Mr. Fergusson was enabled yesterday to pass No. 6 catheter. His health is still unsatisfactory; his appetite remaining bad.

13th.—There has been so much improvement during the last week, that this young man has been able to go out and take a walk in the yard of the hospital. The opening in the perinæum is not closed, and it allows the urine to come away through it pretty freely yet. Mr. Fergusson passed to-day a gum catheter through this into the bladder, and a No. 4 silver instrument through the urethra.

27th.—Mr. Fergusson has found some difficulty, during the last few days, in introducing a No. 5 catheter through the stricture; it appears to have contracted somewhat again. He passed both No. 4 and No. 5 to-day; but it is evident that recontraction of the divided stricture is taking place already; and it is Mr. Fergusson's intention to have the patient placed under chloroform, and then to divide the strictured portion much more freely from within than he had done before; and subsequently to introduce a gum catheter, and retain it for some time. The patient has been enabled to go out and take a trip down the river in a steam-boat.

July 6th.—Mr. Fergusson freely divided the stricture with the urethrotome, and passed No. 8 catheter, and allowed it to remain in the bladder.

9th.—No. 10 elastic catheter was passed, and ordered to be kept in. The patient suffers very little from the presence of the instrument.

16th.—The catheter has been retained, with the production of scarcely any irritation; and, when Mr. Fergusson saw the patient to-day, it was quite loose in the urethra. This therefore was taken out, and as large a one as the urethra could with facility admit was introduced, and is to be kept in. The opening in the perinæum is not entirely closed up. The general health of the patient is still weakly. He feels that the necessary confinement to his bed is a drawback to him.

22nd.—As this patient expressed a desire to return to his home, and as the urethra was now fully dilated, he was dismissed to-day.

We are not able to tell what will be the ultimate result in this case; for, although the treatment which has been followed up here has succeeded admirably as far as it has gone, the patient cannot, of course, be said to be cured whilst he has an opening in his perinæum, and is obliged to use a catheter. Still the reflecting surgeon will see enough in this case to prove highly instructive. It should be considered in more than one point. Let us glance at the original nature of the case, and the treatment which had been put in force at the different periods when he was presented to the notice of the surgeon. The mischief in this instance was produced by the local injury which the patient received; the urethra had been severely contused, inflammation had taken place, and most probably a deposition of lymph, which had terminated in almost obliterating a greater portion of the canal. For the retention which had suddenly ensued, the surgeon in attendance, doubtless with the object of giving his patient the most ready relief, had punctured the bladder above the pubes; this, indeed, gave the man the desired relief, but it was only temporary, because the real seat of his malady was left untouched; the stricture still remained in the same condition as before; for, although an incision was made into the perinæum, it was probably only done for the sake of letting out matter, and not with the object of dividing the strictured part of the urethra; the consequences were, that the patient was constantly obliged to wear a canula in the wound, the urethral canal remained in as bad a condition as it was before, and two new outlets for the urine were formed. When Mr. Fergusson saw the patient, and had carefully examined him, he considered, that, if he made a free opening into the urethra by the perinæum, the urine would come away without hindrance, that the patient would get great relief from his sufferings, and that the stricture in front would be more amenable to treatment. He was the more particularly led to act in this manner, as he had found this practice answer in a case some time before, where there was a stricture involving nearly the whole length of the urethra. In this instance, no instrument whatever could be introduced; but, after a free opening had been made through the perinæum, and the urine was no longer allowed to irritate the contracted part of the canal, he was gradually enabled to dilate it. In the instance now under notice, an unlooked-for complication was met with, in the form of a stony concretion, which Mr. Fergusson considered to have been lodged in a kind of pouch in front of the bladder. The relief obtained by the operation was striking, but it was still found to be impossible to dilate the urethra, although several most patient attempts were made; and herein was shown the fallacy of the doctrine which has been lately broached on high authority, that no stricture is impermeable to instruments. It is probable that a passage could have been forcibly made along the urethra; but Mr. Fergusson deemed it a more safe practice to divide the stricture from within. This has been done freely, and, as far as the case has hitherto gone on, with results as satisfactory as could be expected; for, by reference to the report, it will be seen, that, six weeks previously, no instrument whatever could be introduced, whilst, at the present period, the urethra is fully dilated, and the patient is placed in a fair way of ultimately recovering from the very wretched condition he was in when first admitted into the hospital.

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THE MEDICAL TIMES.

SATURDAY, JULY 27.

ST. MARY'S HOSPITAL.

We have just perused an admirable Report published by the Special Committee appointed to consider the best mode of electing the Medical Officers of this Institution; and it deserves the attention of all who are interested in the well-being of medical charities. The conclusion at which the Committee arrive is, that *open* competition, or the votes of the Governors at large, would not, on many grounds, be the most eligible mode to pursue in the election of the officers; but that the election should rest with a Committee of nine non-medical governors, having the assistance of three medical governors, not being candidates nor allowed to vote.

The reasons which they give for this recommendation, we must confess, have produced a powerful impression on our own minds. We had previously entertained different views, and expressed them in a recent number of the journal.(a) We do not lay claim to infallibility of judgment; and we have not only been enlightened by the temperate and judicious observations of the Special Committee, but by certain proceedings on the part of many of the candidates themselves, which certainly did not enter into our calculation when we last adverted to the subject.

The Committee fully weigh the objection which is most likely to be urged against their proposition, viz., that it deprives the Governors generally of the privilege of voting—of exercising a right which has hitherto been regarded as a necessary accompaniment of their subscription. But surely the Governors are actuated by higher considerations, by purer motives and better principles, than those involved in the exercise of this privilege. The good of the institution should have the first claim to attention; and if it can be shown that open competition will keep out of the field—which it has done already—men of distinguished professional standing, such a scheme should clearly be

(a) April 13th, 1850.

adopted that will not exclude these. Some men of this class have retired, rather than have recourse to means so little compatible with the possession of real talent and true dignity of mind. They would have no chance in the race against others wanting in refined feelings or unscrupulous in their conduct. Most of us know, either from experience or observation, how elections to medical charities are usually carried. We could relate some strange tricks which have been practised to ensure success; and a Correspondent, in our last Number, alluded to a few which are now being employed by some of the candidates on the present occasion.

The recommendation of the Special Committee was negatived, last Friday week, at a meeting of the Governors, *and owing to the presence of the medical candidates themselves;* which is some evidence that they would not like their testimonials and character to be tested by a well-informed and competent jury of twelve men, nine laymen and three professional, the latter not being candidates themselves nor allowed to vote. The majority of them prefer to rest their success on means with which they are quite familiar, and which they know they can use with great advantage. The votes for adopting the recommendation of the Committee were 25,—for rejecting it, 27; and, be it remembered, that the latter number included the votes of many of the candidates.

What are testimonials worth unless tested by *competent* authorities? Are the grocer, the draper, and the merchant, without any disparagement of their understanding, or questioning their desire to act conscientiously, the fittest authorities on such matters? Do they know either the character or the professional position of the candidates? Can they form any sound opinion of their talents and acquirements? Testimonials, however numerous, may be comparatively worthless. It is well known how readily these are obtained,—how readily and thoughtlessly they are given. A long list of monographs and works which an individual may have written, furnishes no test of fitness. It is the *quality* of them which constitutes their value; and can the Governors generally determine this difficult question?

We regret that the candidates did not support the recommendation of the Committee. It would have reflected credit on themselves and the profession generally. It would have shown, that they were fully sensible of their just claim to attention, and were willing to abide, if not by the decision of a jury of twelve men infallible in their judgment—a jury from its constitution, nevertheless, far more capable of arriving at a correct estimate of the value of testimonials and talents than the Governors generally, who can know little or nothing of the qualifications of the candidates.

We have now lying before us a large mass of pamphlets, setting forth the extraordinary merits of the various aspirants for office. This is a great and a growing evil, and one that cannot be too strongly condemned. Testimonials have a value, but it is not in relation to the public at large; it is in relation to those only who are capable of analysing their worth. Unfortunately they are intended for the public, and it is here that their impressions are calculated upon. If it be a legitimate mode of advertising, it is not one of the most honourable. A sensitive mind shrinks from such a mode of intruding on the notice of others. It is a practice belonging to modern times, and will continue to grow until juster and more rational means are adopted for ascertaining the fitness of individuals for medical appointments.

The assertions of a correspondent in our last number yet remain uncontradicted; and we have been credibly assured of the truth of all he stated, and more especially, that some of the candidates have clubbed together to render their election sure. Each individual is said to contribute a certain sum; and the general fund is employed in making new governors, taking care that these shall vote only for certain parties, which are named. If the subscription be paid three months before any election, the subscriber of three guineas is entitled to vote. Independently of such an asserted arrangement, it is said that certain of the candidates have agreed to support each other, each inducing his friends to vote for the others included in the compact. It is scarcely necessary to remark, that a combination of means of this kind is almost certain to be successful in its object and to defeat every other candidate who rests on his own individual interest and qualifications, how excellent soever these may be.

We have this consolation, that evil always corrects itself. An abuse may exist, and frequently does for a great length of time, and is tolerated; but it steadily grows with the toleration, until at last it exceeds the bounds of propriety—the limits of endurance—and then come the sweeping measures of reform. We are gradually approximating to this state of things, in regard to the influences which are exercised in the appointment of officers to charitable and other institutions. Real talent has little chance of recognition. It is lost sight of among the noisy and unscrupulous crowd of aspirants.

We thank the Special Committee of St. Mary's Hospital for their well drawn up Report. It does them credit. A few more such reports, aided by the practices of the candidates, will not only thoroughly enlighten the public mind on the nature and extent of existing evils, but will ultimately correct them. The subscriber, ere long, will forego his privilege of voting, when he sees the injurious consequences to which it inevitably leads. It is somewhat singular, that all this canvassing is premature. The Committee have not yet advertised for medical officers—have given no intimation that such are wanted.

The facts which are here stated, exhibit in a most unfavourable light the existing condition of the medical profession,—the hard and uninterrupted struggles to live. The profession is overstocked, and hence the necessity of extraordinary means to attain a respectable position in society. No exertions can multiply patients beyond the natural growth of the population. Talent, enterprise, and capital employed in commerce, can find new channels for their employment—can open new markets in remote and almost unknown regions; but the profession of medicine has no such outlets for its surplus mental energy. Even with the gradually increasing population, we are inclined to think that the existing market for its demand—the field for its exercise—is rather diminishing than enlarging. The improvement in the sanitary conditions of the country—the progress of civilization—the more temperate habits of the people—the growing study of the functions of the animal economy, and of the causes by which it is liable to be deranged, are all circumstances, individually and collectively, tending to lessen the sum of human wretchedness and misery, and hence diminishing the demands for the skill of the medical practitioner.

Since the foregoing remarks have been in type, another general meeting of the Governors has taken place, at which was *rescinded* the vote agreed to at the last, viz., that the election shall be by *open* competition, or, in other words, that the election of the officers shall be determined by the subscribers at large.

The Special Committee have now carried all the propo-

sitions contained in their Report, save one, "That such committee shall have power to call in the advice of any three medical governors, not being candidates for office, whom such committee may select, to sit upon such committee, provided, however, that such medical governors shall not be entitled to vote upon such committee."

We congratulate the Committee on this measure of success; at the same time, we regret that the three medical governors are excluded from their deliberations. They are thus deprived of the knowledge and experience of men who are alone capable of forming a correct estimate of the talents, acquirements, and fitness of the candidates for the several appointments, or at least approximating to a sound judgment on these matters. The Special Committee may not be to blame for the exclusion of them. It is more than probable that they found it impossible to secure the services of three medical governors, eminent for their position and character, who were willing to undertake such an onerous and ungrateful duty. It is one which few would like to perform. It is very different from the position of the examiners at any of the colleges. Here the success of the candidate depends on the manner in which he acquits himself. He has a fair opportunity of displaying the talents and acquirements which he possesses; and if these are found wanting, he can scarcely entertain any permanent bitterness or animosity against those by whom he has been rejected. The case, however, would be widely different with the three medical governors. The candidates for the hospital appointments, if unsuccessful, would throw upon them the entire blame of their failure, and exercise their ingenuity in the endeavour to discover the motives by which they had been actuated; and we have no doubt that these, whether real or imaginary, would be unceasingly brought under public notice.

We think it only just to state the difficulties of the position in which the medical governors would be placed in the discharge of their important duties. Nevertheless, we deeply regret the decision at which the meeting arrived, not doubting that there are medical governors sufficiently high in station to give them a right to decide on the qualifications of the candidates, and sufficiently independent to exercise it honestly, and regardless of consequences.

It is, however, much better that the testimonials, talents, and character of the candidates should be soberly and analytically examined by *nine* governors—men who have the interests of the Institution at heart, and who will not lose sight of these for the purpose of gratifying the wishes of determined suitors for office—rather than that the election should rest with the subscribers generally, who, from various causes, are much less likely to act independently. It is a movement in the right direction; it is an acknowledgment of the necessity of modifying the prevailing mode in the election of medical officers to institutions. This is a great point gained, and we believe that it originates entirely in the unscrupulous means which have been employed by the candidates on the present occasion, to ensure their success.

We should like to know on what grounds Mr. Heale stated at the meeting, that there were only *three* medical men in London who could be trusted to co-operate with the nine lay governors, viz., Sir Benjamin Brodie and Drs. Bright and Watson. This is an insult to the profession at large. We have a high opinion of the talents and integrity of these gentlemen, but we cannot allow them to monopolise qualities which do honour to human nature. We could mention many other men equally talented and honourable, and in every way as fitted to perform the duties that would be imposed upon them. Such a remark is an insult to these gentlemen themselves. Flattery so gross and unjust cannot be palatable to them; and, from our knowledge of them, we should say that they are among the last that would desire to rise in public estimation at the expense of men equally worthy of countenance and support. The observation so uncalled for, will be as painful to them as it is to ourselves.

THE LONDON UNIVERSITY GRADUATES' COMMITTEE.

Animated solely by a desire to see the University of London take that place among the liberal Institutions of the age, which, if it is to continue to flourish, it must take, we shall touch on what appears, at the present moment, to be seriously injuring its prospects. We do this with the more reluctance, because we know that the large majority of the Graduates' Committee are most able and enlightened men—men who can have no interests to serve distinct from those of the Graduates at large. But we feel that, unless that Committee be remodelled, it must cause shipwreck of the hopes of those whom its members dream perhaps they represent. It is asserted that one of two things must happen: either an organized opposition to that Committee be formed; or the great body of the Graduates, feeling that they are not represented, cease to take any interest in their proceedings. The members of the Committee have already found both the Government and the Senate framed of unyielding material, and that when those bodies supposed the Committee really represented the Graduates. What, then, will they find them, when the Committee are felt to represent only a trifling section of the Graduates? The members of the Committee, it is confidently asserted, have retained office, although as a body they have lost the confidence of their constituents; are afraid to repose trust in the Graduates; are, in fact, the most illiberal in conduct, while professing the most liberal principles. If they have acted thus—and their actions appear to bear no other interpretation—it has doubtless been from an impression that men less able than themselves might possibly be called into office; that some one or two of the most active among their body, as is undoubtedly the fact, would not be re-elected. But if they are afraid freely and honestly to submit the election of a Committee to the Graduates at large, with what confidence can they ask the Government to allow those very Graduates to elect the governing body of the University? If not to be trusted to select from among themselves the most proper men to carry out their object, how would they execute the important trust of electing the Senate?

Until, then, the Committee has adopted a more liberal constitution for itself, it ought not, for the sake of consistency, to apply for a more liberal constitution for the University. Nor till the members of that Committee can themselves repose confidence in the Graduates, ought they to ask the Senate to trust them. A third of the Committee retiring, to be eligible for re-election, and to be proposed in a body by the remaining members of the Committee, will not satisfy their *nominal* constituents. Let *whatever* Graduates please nominate and second members of their body for a seat on the Committee; let a printed list of all those duly proposed and seconded be sent round to the electors, with the names of the proposer and seconder of each appended; then let the list be returned to the Secretary, the pen having been passed through obnoxious names; and we should see a Committee fairly representing the Graduates,—one having that

moral weight which, we regret to say, the present does not possess.

THE CHOLERA IN LONDON.

We beg to repeat, from the most indisputable authority, that there have lately been received into St. Bartholomew's Hospital cases of true Asiatic cholera. The first patient, a middle-aged man, in a state of great destitution, without food, or clothes, or home, became suddenly ill after passing a night in the open air near Smithfield. He was admitted into the hospital with cold and blue extremities, cold tongue and breath, rice water evacuations, and suppression of urine; and the body emitted that peculiar odour which those who have once been in a cholera ward will never forget.

The second patient, a boy, was seized with similar symptoms, but less severe, whilst going to his work early one morning, near Gray's-inn-lane.

The third patient, a married woman, aged 30, was suddenly attacked with violent purging whilst going to work; she sank at once in the street, and was conveyed to the hospital. The symptoms in this case were, perhaps, only those of severe diarrhœa, but not of the usual kind. All the patients are doing well.

We are told that the Board of Health, *after minute inquiry*, came to the conclusion that no case of Asiatic cholera has lately occurred in London. We hope, for their credit' sake, they made no such mistake. The *Weekly Chronicle* repeats the old myth, that the habit of over-indulgence in fruit and vegetables, at this season, accounts for the cases to which attention has been called. Those who suffer from Asiatic cholera are, for the most part, the needy and starving, who have not the means of indulging in luxuries.

Our information comes from a direct source, and what we state may be relied on. There is no possibility that the disease should be mistaken in an institution where, only last year, patients so suffering were received to the amount of several hundreds.

The disbelief of our statement which has been expressed, is to be attributed to the unwillingness with which an unwelcome truth is ever received. We cannot help saying, that this is a very silly habit. Our readers, however, may at all times depend on the truthfulness of our statements; and it can hardly be thought we should make asseverations solely for the purpose of acting upon the fears of the timid, or of unnecessarily exciting alarm in the minds of the public. At the same time, however, that we write thus, it is pleasant to be corroborated in any measure by official statements, and we here place the authority of the Registrar-General against the reported statement of the Board of Health. This public officer, in recording the cases of cholera which occurred last week, characterises them as follows :—

At 60, Porchester-terrace, St. John, Paddington, on the 18th July, a gentleman, aged 63 years, died of "malignant cholera, (18 hours.)" Mr. Holloway, the registrar, makes the following statement:—"It appears, from the information of the person who was present at the death, that the stench from the drains was very great, and that the deceased had often complained of it. The houses in the terrace are near Kensington-gardens, and appear to be very healthy, being large, unattached, and provided with gardens." At 3, Litchfield-terrace, Queen's-road, Holloway, on the 18th July, the daughter of a domestic servant, aged 8 months, died of "diarrhœa and sickness, (4 days,) cholera Anglica." Mr. Butterfield adds, that "cholera was most virulent in the immediate neighbourhood at the last visitation." At 31, Margaret-street, Haggerstone East, the daughter of a labourer, aged 5 years, died of "cholera, (13 hours.)" Mr. Ditchman, the registrar, states that he "inspected the premises immediately, and found that they consisted of four small rooms, of which the two lower were inhabited by a man, his wife, and five children; while the two upper were occupied by a man, his wife, and three children. The three children, of whom the deceased was one, had hardly recovered from a severe form of scarlatina. Near the spot is the open sewer, which was so often complained of last year, as the source of cholera and all kinds of disease; and at present it is in a most filthy state. Also at 10, Albert-street, in the same sub-district, on the 14th July, the son of a shoemaker, aged 1 year, died of "cholera, (4 days.)" "This house is well drained, and remarkably clean." At 8, St. Peter's-place, Walworth Common, on 15th July, the daughter of a cab proprietor, aged 7 months, died of "dentition, cholera Anglica, (5 days.)"

No fresh cases of Asiatic cholera have occurred for several days, to the best of our knowledge, and we have only to express a hope that the disease will not become epidemic.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Contributions to Mental Pathology; with Introductory Observations, containing the Past and Present State of the Insane at Ceylon. By James George Davey. London. 1850.

The proximate cause of insanity is, perhaps, less understood than that of any other disease, and to this circumstance may be attributed the great number of books which are written on the subject. "*Scribunt indocti doctique;*" every man who has been connected with a lunatic asylum fancies he knows more about the brain and the mind than any of his other professional brethren; and yet, for our own part, we would prefer the opinion of any incidentally selected member of the College of Surgeons, or Fellow of the College of Physicians, to that of nine out of ten medical practitioners who pride themselves on their personal management of the insane. We are fully borne out in this view of the case by the fact, that none of those men who have made a specialty of the study of insanity, and who are either proprietors or superintendents of asylums—public or private—have yet succeeded in throwing any light, either upon the functions or pathology of the brain or upon the constitution of the mind. We appeal to the evidence of their own literature, which too often indicates a sad want of elementary metaphysical knowledge. The term pathology, as applied to mental phenomena, is itself extremely objectionable. What does it mean? The aberration of any one or more of the intellectual faculties does not imply any morbid condition of the thinking principle itself. True, we may talk of the pathology of the brain as of any other viscus in the body; but when this kind of phraseology is applied to that which is immaterial, the existence of which is only made known to us by spiritual, in contradistinction to material phenomena, the case becomes very different, and these psychological gentlemen then wander as far out of the path of common sense and reason as any of their own patients whose aberrations may mislead them.

Again: the word psychology, when properly applied, is legitimate enough, and, as Sir William Hamilton truly observed, advantageously supersedes the old term pneumatology; but who would ever have dreamed of the adjective, psychological, being so abused as we daily find it in different essays and journals? There are some professional men who appear to be, as old Burton describes it, "bewitched with the love of fame,"—who speak of nothing but psychology. With them everything must be "psychologically considered;" they give their patients psychological medicines, and feed them, we believe, on psychological batter-pudding! Jesting apart: there is no department of science which demands a more careful selection and appropriation of language than that which is connected with the study of the human mind. Here, terms indefinitely and improperly applied obscure the object of investigation, and lead us seriously astray. It was profoundly observed by Lord Bacon, that "men believe their reason governs their words; but it often happens that words have power enough to re-act upon reason." Hence the necessity of precision of language in investigations so notoriously obscure and difficult as those connected with the human mind.

These observations have been suggested to us by the title-

page of Dr. Davey's book; and we may, at some future period, enter more fully into this subject. But, to proceed *ad rem*,—we regret that so large a space in the pages before us has been devoted to contentious matter. "The memory of mischief," says Johnson, "is no desirable fame;" and we feel assured, that no person upon this side of the Equator cares one straw for the bickerings and squabbles which took place between Dr. Davey and the Ceylon authorities. He was fortunate in obtaining so good a colonial appointment; he may have been very vexatiously treated;—but we have only an *ex-parte* statement before us; and were we to hear the other side of the question, we might possibly be reminded of an anecdote told of Henri IV., who, after hearing two lawyers plead upon opposite sides of the same case, exclaimed suddenly, with soldier-like bluntness, "Ventre, St. Gris! il me semble que tous les deux ont raison;" and, doubtless, the Governor of Ceylon and Drs. St. John and Roe thought themselves perfectly justified in the course they adopted. The volume before us contains three reports, drawn up by Dr. Davey, giving the usual details of the number of admissions, discharges, and deaths; and the medical and moral treatment adopted in the Ceylon Government Lunatic Hospital. To each report is annexed an appendix, containing much extraneous and irrelevant controversial matter. Dr. Davey, however, is right in the censure he has pronounced upon Dr. Wigan's Theory of the "Duality of the Mind;" it is an old exploded doctrine, founded upon a false analogy, derived from the double relations of the organs of animal life. No person who has seriously studied the subject, could for a moment sanction, or award any merit to a doctrine so manifestly fatal to the unity of consciousness. In the medical treatment adopted by Dr. Davey, we do not observe anything which demands particular attention; his observations evince as much knowledge of insanity as other specialists usually enjoy. The judicious treatment of constitutional symptoms, and the safe custody of the lunatic, managing his vagaries with every kindness and humanity, are all that are accomplished in this country, even in the best conducted asylums. Hence, when cures are effected, it is by the subtile agency of nature, rather than by the interposition of any specific plan of medical treatment. We do not, however, wish in any respect to disparage these establishments, either public or private; albeit, we maintain that the Legislature ought to devise a more satisfactory code of laws for their better regulation. From the internal evidence contained in the reports before us, Dr. Davey appears thoroughly to understand the details of managing a lunatic asylum, and having for some time discharged, with credit to himself, the responsible duties of medical superintendent at Hanwell, before proceeding to Ceylon, he is, we have no doubt, well qualified for any similar appointment.

A much less Painful and more Scientific Method of Extracting Teeth. By Henry Gilbert, M.R.C.S.L., Surgeon-Dentist. Renshaw. 1850. Second Edition.

We are glad to find that Mr. Gilbert has adopted the advice we gave him when noticing the first edition of his work; he has considerably reduced the size and price, the former being effected by the omission of the mere anatomical details. In the more practical part of his book, he has made several emendations and additions, especially by the narration of some interesting cases, in which teeth presenting unwonted difficulties were adroitly extracted by the aid of his chair, when other appliances had failed. We are pleased to learn from all hands that the profession readily recognize the great improvement Mr. Gilbert has made by the invention of his operating chair.

Is the Practice of Medicine in 1850 *a Degenerate Pursuit?* By a Practitioner. Second Edition. 1850.

This pamphlet is a reprint of a review, in the *London Journal of Medicine*, of Mr. Skey's Hunterian Oration. The writer has exposed with great force the fallacy of Mr. Skey's statement, that the present state of the English Practitioners of Medicine is, as a whole, below the standard of any previous time. He points out very clearly the great improvement which has taken place, during the last thirty years, in the professional education of the great body of general practitioners, and with perfect justice attributes this to the exertions of the Societies of Apothecaries. The fact that the pamphlet has already passed into a second edition is a proof that it is pretty well known; but, if any of our readers have not met with it, we earnestly recommend it to their perusal as the best statement of the present condition of the education of the profession, and of the efforts made to improve it, with which we are acquainted.

A Treatise on Public Health, Climate, Hygiene, and Prevailing Diseases of Bengal, and the North-west Provinces. By Kenneth Mackinnon, M.D., Surgeon to the Honourable East India Company, Cawnpore. Printed at the Cawnpore Press. 1848. Pp. 395.

We regret that we have not long ago noticed this very useful and philosophical work. It is divided into two parts. The first is devoted to the sanitary conditions of Europeans and natives in Bengal, and it is the most complete treatise on Tropical Hygiene which has yet appeared. We beg earnestly to direct the attention of the high medical authorities connected with the India House in this country, to the statements made in it. The second part is occupied by histories of specific diseases, chiefly malarious fevers, cholera, Pali plague, liver diseases, and dysentery. This portion of the work also contains much interesting and useful matter, and we shall shortly take an opportunity of reviewing it in connexion with some other writings on tropical disease.

Health, Disease, and Remedy Familiarly and Practically Considered. By George Moore, M.D. 1850. Pp. 372.

This is a work which we should wish to see as widely circulated as Combe's Physiology, to which, indeed, it may be compared. It is written in the best spirit, and the difficult subjects discussed are explained not only with clearness and ease, but with elegance and force. Let us beg our readers to recommend it to their non-professional friends, as its perusal will remove many popular errors respecting our Profession in which the laity indulge.

Guide de Médecin Praticien. Par F. *et* J. Valleix, Tome Premier. Deuxième Edition. 1850. Pp. 727.

We merely announce the appearance of the first volume of the second edition of Valleix's well known and esteemed work. The volume contains the account of the special diseases of the pulmonary and circulating organs. As soon as we have received the other volumes we shall review the whole work in connexion with some of the other German publications of the same class.

Observations on London Milk, &c. By H. Hodson Rugg, M.R.C.S. London: 1850.

Mr. Rugg here presents us with an awful account of the abominations wherewith we have been wont to dilute our tea or other beverages under the name of milk; and, to increase the horrors of the prospect, he has adorned his pamphlet with a frontispiece of magnified globules, which we can compare to nothing else than the mountains in the moon.

London cows, according to Mr. Rugg, are the most ill-treated of beings; and, accordingly, they return the compliment by secreting, for the consumption of their oppressors, a fluid little less than poisonous. Yet this does not satisfy our milkmen. The consumptive milk of the London cow is adulterated with a variety of ingredients—flour, starch, chalk, and brains—not fresh and healthy brains, but brains in a state of putrefaction. "Surely," saith Mr. Rugg, "this is a dreadful state of things." The perseverance which Mr. Rugg has shown in the exposure of such an abuse is highly creditable to him, and will, we trust, meet with its reward. The same praise we cannot bestow on the literary execution of the pamphlet. Its style is quite as thin and impure as the milk of which Mr. Rugg speaks. But we suppose that a mixture of creta cum cerebro is not a very spirit-inspiring beverage.

On the Development of the Great Anterior Veins in Man and Mammalia. By John Marshall, F.R.S., F.R.C.S., Assistant-Surgeon to University College Hospital. From the Philosophical Transactions. Part I. for 1850.

One of the most original anatomical papers which has appeared for a long time. The subject is of such a nature as to be hardly intelligible without a longer explanation than

we ean afford; but we may state, that Mr. Marshall has discovered, and aeeurately traced, the suecessive metamorphoses which occur during development in the human venæ cavæ and coronary veins, and has indicated the exact relation which the structures, or the remains of struetures, in the adult human heart bear to the corresponding permanent conditions in the lower animals. One interesting point is the faet, that the dilated portion of the coronary vein, usually named the coronary sinus, is the analogue, or the persistent part of the fœtal left venous trunk, which in man beeomes obliterated, except in this part, but in some of the lower animals remains open, and constitutes in them a second or left superior vena cava. But this is only a single point; the whole history of the development of the anterior veins is carefully worked out.

Memoir on the Influence of Hypertrophy and Dilatation on Diseases of the Heart. By A. Halliday Douglass, M.D. Pp. 49. Edinburgh. 1850.

A praetical and useful paper, illustrated by much good clinical observation. Occasionally there is a want of precision in the description of the eases and the *post-mortem* appearanees, which somewhat destroys the value of the reports, and now and then the views of other writers on the course and progress of cardiac affection have not been duly considered, so that the author is sometimes uncertain and obscure, where, with a little additional referenee to others, he might have been enabled to perceive quite clearly the inferences from his faets. Yet there is so mueh really good observation in the treatise, that we are almost ashamed of finding the least fault.

Traité Pratique d'Auscultation. Par MM. Barth et Roger. Troisième Edition. Paris. 1850.

A third edition is a kind of guarantee of merit, and in this case the third edition is not a deceptive test. Considerable improvements have been introdueed into the present work, more especially in reference to the views of Skoda on eonsonance, on the heart's sounds, &c. The subject of percussion is also now included. The great merit of the work still consists in the lueid and easy manner in which the somewhat complex subject of auscultation is taught, and the great fault is still the devotion of an unconscionable amount of space to discussions which are really useless. The writers also seem to have stopped at Skoda in their examination of the German stethoscopists, and by no means do justice even to his praetical observations.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ANGINA PECTORIS.

In the *American Journal of the Medical Sciences*, Dr. Kneeland relates the case of a gentleman, 52 years of age, who died from an attaek of angina pectoris. An examination of the body was not permitted. He then proceeds to investigate the semeiology and pathology of this complaint; as it is one at present buried in great obscurity, we shall condense his remarks, so as to plaee his views fairly before our readers, omitting however all referenee to this particular case.

The paroxysm comes on suddenly during walking, exercising, facing a cold air, after indiscretion in eating or drinking, or from strong mental emotion. Any excitement of the respiratory motions is sufficient to bring on an attack, during defæeation, mieturition, or even a change of position. The attacks eome on suddenly, in the midst of apparent health, often without premonitory symptoms; their oecurrsnce is irregular and intermittent, the patient enjoying his usual health in the intervals. There is a constant distressing dyspnœa, with great anxiety; the latter not arising from pain during respiration, but from diffieulty in obtaining sufficient air for the proper oxygenation of the blood: hence the respiratory movements are a little hurried in most cases, accompanied by panting, deep sighs, and yawning; there is also a sensc of constriction in the chest. There is frequently also, a sense of suffocation, referred to the larynx, with difficulty of speaking, and copious frothy expectoration. The pain with constriction which is felt at the lower part of the sternum, radiates in all directions, to either or both arms, upwards to the neck, jaws, and sides of the faee, and downwards to the abdominal viscera (especially the bladder) and to the lower extremities. Of these sympathetic pains, the most constant is that in the arms. In the parts attacked by this pain, there is almost always, in severe eases, a sense of numbness, soreness, and stiffness in the course of the nerves. The pulse is somewhat more frequent and weaker: when irregular and intermittent, the disease is complicated by cardiac or aortic disease. The paroxysm ends with eructations and vomiting, which afford relief. Other symptoms are, loss of strength and conseiousness to a certain extent. The treatment consists of antispasmodics, stimulants, carminatives, and eounter-irritants. It is generally considered to be unavailing.

The prineipal lesions found after death involve the organs of cireulation. These are ossification of the coronary arteries of the heart, with more or less obliteration of their cavity; dilatation, ossifieation, or uleeration of the aorta; cartilaginous or ossified mitral and semilunar valves; dilated or hypertrophied, or atrophied heart; hardening or softening of its muscular substance; fatty degeneration or aeeumulation at its base; adhesions, and effusion in the pericardium. In the lungs have been found sanguineous effusions; the bronchi filled with a frothy, bloody serum; the substance of the lung very dense and heavy; pleuritic adhesions, with or without effusion; accumulation of fat, and abseesses have been found in the mediastinum, and ossification of the costal cartilages.

Heberden and Hamilton have referred an attack of angina peetoris to an ill-defined spasmodic state; Rougnon and Baumés to ossifieation of the eostal cartilages, causing obstructed respiration and stagnation of the blood in the heart; Fothergill and Blaek to aecumulation of fat in the periear-dium and about the heart; ossification of the coronary arteries, and consequent diminished nutrition of the heart, were the causes, aceording to Jenner, Parry, and Kreysig; ossifieation of the valves of the heart, aeeording to Blackall. Others ascribed it to spasm of the heart; to a gouty or rheumatie metastasis; to spasm of the diaphragm and respiratory muscles; to displacement or compression of the heart, and to various organic lesions of the organ. Jurine attributed it to an affection of the pneumogastric nerve, causing incomplete oxygenation of the blood, and asphyxia; Desportes to a neuralgia of the pulmonary and cardiac plexus; Bell to a lesion of the respiratory system of nerves; Laennee to neuralgia of the heart.

Dr. Kneeland settles at once the question of organic eardiac diseases as the cause of angina peetoris. They may be, he says, oecasional exciting causes; but must be regarded as complications having nothing to do with the special disease. He regards it as having its seat in the pneumogastric nerve, its branches, terminations, and communications. Several authors, as above stated, speak of it as a kind of neuralgia; some assigning one set of nerves, others another set, as its seat. Dr. Kneeland considers it to be a nervous disease, from the sudden manner in which the symptoms come and go, and their intermittent charaeter; from the peeuliarity of the pain, and its sudden and extensive radiations, leaving the parts numbed and painful, while at other times pressure relieves the pain; from the ineonstaney, and even the entire absenee of morbid lesions; from the undoubted cure in many cases; and from the nature of the medicines most sueeessful in its treatment—opiates and antispasmodies. He eonsiders that angina pectoris bears an intimate relation to essential or idiopathic asthma.

Dr. Kneeland proeeeds to demonstrate that angina pectoris depends on some affection of the pneumogastric nerve, by traeing, first, its origin, course, and distribution, and then showing, that the symptoms and pathological changes eaused by its section, modified by its connexion with the great sympathetie, are those described in the commencement of this article as pathognomonic of angina peetoris.

With respect to the nature of the disease, Dr. Kneeland says, "the par vagum, like other sensitive nerves, may become the seat of disordered sensation; it may be affected with neuralgia. Angina peetoris, depending on neuralgia of this nerve, is characterised by the same excruciating pain, sudden in its appearance and disappearance, arising from similar causes, and benefited by the same treatment as neuralgia in other nerves. It may arise from irritation of this nerve at its origin in the medulla, in its trunk, or in its vis-

ceral extremities. When the medulla is affected, there will generally be tenderness over the corresponding portion of the spine; the spinal irritation or sensitiveness permits mild stimulants, which in a state of health are natural or harmless, to cause the most acute pain: as the sensation of cold air in the lungs during the paroxysms of this disease. There may be great suffering, without serious injury to the health; but, if the nervous centre be affected, or the irritation be communicated to the numerous connexions of this nerve, serious functional trouble is the result. In some cases the neuralgia may depend on exciting causes in the organs of circulation, (as irritation of the recurrents from disease in the arch of the aorta, and possibly of other branches, from ossification even in the coronary arteries;) but, we believe, in most cases, the medulla oblongata is the seat of irritation, whenever angina pectoris depends on neuralgia; and to this we refer a great many cases."

Next to neuralgia, Dr. Kneeland regards rheumatism affecting the fibrous structure of this nerve as the cause of angina pectoris. He says, "authors are agreed that, in many cases of angina pectoris, the patients have had a rheumatic diathesis; the disease is often mentioned as disappearing during attacks of rheumatism, and re-appearing on the subsidence of the rheumatic symptoms: in other words, angina pectoris is in these cases a metastasis of rheumatism." "Rheumatic angina pectoris accords very well with the predisposing and exciting causes of many cases, as well as with the symptoms and treatment." Neuritis may also cause the disease.

With respect to prognosis, Dr. Kneeland, as the consequence of the new character he affords of the cause of the disease, gives us some reason to hope for other than a fatal termination in many cases,—a hope not entertained, of course, by those who regard it as dependent on organic lesions of the heart and its vessels. Dr. Kneeland says, it may occur, like other neuralgiæ and rheumatism, at all ages, and in such persons, (that is, in the young and those otherwise healthy,) may be cured by appropriate remedies. There are even, he adds, several undoubted cases of cure among old people. If the disease be neuralgic, recovery may be complete without any organic change; if rheumatic, recovery may leave behind it a predisposition to cardiac disease.

"During a paroxysm, after all evident exciting causes have been removed, the treatment will be active in proportion to the strength of the patient and the violence of the symptoms. If there be reason to suspect an effusion of blood into the medulla oblongata, active depletion would be indicated, even in plethoric individuals, by venesection, leeches, or cupping over the spine. Whatever the supposed cause, opiates, antispasmodics, and carminatives are usually given, with ether, ammonia, or other stimulants, if there be coldness and faintness. To these should be added counter-irritation by blisters, but especially by dry cupping over the spine." In addition, Dr. Kneeland recommends the inhalation of oxygen, as the principal danger arises from insufficient aëration of the blood. During the intervals between the paroxysms, the preventive, and curative treatment of neuralgia or rheumatism is to be employed, according to the history of the case. The great remedy, however, according to Dr. Kneeland, is electricity; if it be the wish of the physician merely to stimulate the filaments of the par vagum, electro-magnetism may be employed; if it be desired to produce structural change in the medulla oblongata, the uninterrupted current of the battery must be used. "By stimulating the paralysed spinal accessory, not only is the vitiated air expelled from the lungs, but oxygen is admitted, which might also be increased by inhalation of the gas; so that these two remedies might be advantageously combined. A current in the direction of the nervous ramifications would stimulate directly the motor filaments; in the opposite direction, the sensitive filaments; but, in the mingled filaments of the par vagum, reflex action will often cause similar effects, in whichever direction the current is passed. However, in cases of spinal irritation or inflammation, it would be improper to send a current towards the medulla."

The following are Dr. Kneeland's conclusions:—

1st. From the symptoms and morbid appearances, angina pectoris is not a disease of the lungs, heart and its vessels, or stomach, but an affection of the nerves supplying those organs.

2nd. Anatomy, physiology, and pathology, would lead us to place the seat of angina pectoris in the par vagum, and not in the sympathetic system of nerves.

3rd. Like other nerves, the par vagum may be affected with neuralgia and rheumatism; with inflammation; it may be compressed by morbid growths; its spinal origin may be compromised by hæmorrhage, accidental wounds, and various irritations, all of which may cause the symptoms of angina pectoris.

4th. Angina pectoris and asthma are intimately related, the former being an affection more especially of the sensitive filaments of the par vagum, and the latter an affection of its motor filaments. Both are generally more or less combined in the same case.

5th. Angina pectoris is a disease not necessarily fatal, especially in young persons, if accurately diagnosticated, and properly treated.

6th. In addition to the remedies of the books, special attention should be given to the inhalation of oxygen and to the use of electricity.

7th. In cases of angina pectoris, attention should be directed to the examination of the par vagum, from its origin to its termination, which doubtless, on careful examination, will exhibit lesions sufficient to account for a fatal result.

THE EXANTHEMA OF CHOLERA.

M. Thore, ex-interne, has published, in the last Number of the *Gazette Médicale*, an interesting Memoir on this subject, over which much obscurity still hangs. Medical men, in fact, are far from being agreed on the nature of the eruption which has frequently been observed as a concomitant of epidemic cholera. Some describe it as a kind of "pustular redness." Others speak of "miliary vesicles." Kalher, of Warsaw, calls it a "Herpes zoster," or an "erythema tuberosum." Romberg and Babington class the eruption under "Roseola." A later writer, again, calls it "choleric erythema," while MM. Briquet and Mignot have seen the eruption assume the appearance of "urticaria," or a "confluent rubeola." Amid such variety it is not easy to choose or say to what side truth leans.

According to M. Thore, the eruption occurs more frequently amongst females than males. The mode of treatment employed does not appear to have had any influence on its development, nor was it possible to discover any occasional cause of the eruption. It appears more frequently in women, probably on account of the greater fineness of their skins, and their being more subject to the stage of reaction. It is to this latter circumstance that the author attributes the development of choleric exanthemata. The capillary cutaneous circulation has been greatly deranged during the cold stage, and when the blood is driven to the circumference during the stage of reaction, it is not to be wondered that eruptions are developed.

In the cases observed by M. Thore the eruption presented different aspects. In one it was a perfect roseola; in another, it bore more resemblance to erythema, or rather to scarlatina, for on the third day it would have been impossible for the most practised eye to distinguish the eruption from true scarlatina.

The same uncertainty and irregularity characterise the descriptions of choleric eruptions given by various practitioners, and, in the present state of our knowledge, it is more prudent to await further information, than conclude, as a few have done, that the eruption presents anything specific or peculiar.

MILKY URINE.

Some years since, M. Rayer directed attention to a peculiar species of hæmaturia which prevails in some tropical countries, and especially in the Mauritius. Persons labouring under this complaint frequently come to Europe for treatment. The following case, recently treated by M. Rayer, will serve as an example:—

Mr. N—, 40 years of age, of nervous temperament, is an inhabitant of the island of Bourbon. At the age of twenty he became twice infected by gonorrhœa, and ever since has been subject to slight discharge, with a sensation of itching about the middle of the canal, and some scalding. The jet of urine was bifurcated, and the symptoms all became more severe during the last few years. In 1846, the patient received a violent shock by falling from a carriage, and immediately afterwards passed a quantity of milky urine. In 1849, the same discharge suddenly appeared, and some blood

was deposited at the bottom of the night vessel. A few tepid baths, with rest and proper regimen, reduced the quantity of blood; but the urine continued milky. For several months the alternations of cure and relapse continued; and the patient, worn out, came to Paris for treatment. During the voyage, and as soon as a temperate latitude was reached, the hæmaturia suddenly disappeared for twenty days, but returned again. Since his arrival in France, the patient urinates eight or ten times during the day, and once or twice at night. He passes very little blood now, but the urine is still milky. The treatment employed is insignificant, because M. Rayer has found that mere residence in a temperate climate is almost always sufficient to remove the disease.

TREATMENT OF LUPUS.

M. Hoppe, of Bonn, has recently published a short treatise on the cure of lupus by excision. The operation, it appears, was first had recourse to in 1834; and since 1840 the author has never employed any other mode than that of excision for lupus of the face. Whenever it is possible, he removes the whole of the diseased tissues at one time; but in other cases partial extirpations become necessary. They are followed by success, according to the author, in a majority of cases, and are much superior to any caustics, or the actual cautery. In syphilitic lupus, or when the nose is, at the same time, attacked by pustules of impetigo, the knife must not be employed.

In illustration of the efficacy of extirpation, Dr. Hoppe relates a very remarkable case. The patient, a female 24 years of age, had laboured under lupus since the age of 9. The nose had been completely destroyed, and the whole face enormously hypertrophied. After a preparatory treatment of three months, the author commenced a series of partial extirpations, which he continued with great perseverance for eight months. Such was the extent of the hypertrophy, that each flap removed was at least three inches thick; and every spot which was tumified, maculated, ulcerated, or of an intense red colour, was removed. The case terminated favourably, and the disease never returned. There is not, perhaps, on record so remarkable an example of success under such unfavourable circumstances; for the patient would have been, unquestionably, abandoned as incurable by any other practitioner.

ALKALINE NATURE OF THE SERUM OF THE BLOOD.

The study of the blood has, within the last few years, assumed the rank which it was entitled to hold in medicine; but the great difficulty of the subject has hitherto prevented the investigators from arriving at any very practical conclusions. One point, however, seems to be clearly made out, viz., that mere quantitative analysis of the blood's elements will never lead to any great discovery in pathology. This arises principally from the rapid manner in which certain elements of the blood in the living body appear to be transformed the one into the other. Thus it would seem that fibrine and albumen are really but modifications of one and the same principle; and, if this be the case, we shall have to determine, not the relative proportions of fibrine and albumen in a given quantity of the vital fluid, but the conditions under which one form may be transmuted into another.

In a learned memoir, presented at the last meeting of the Academy of Medicine, M. Cohen discussed many interesting questions connected with this subject. The following are the principal conclusions at which the author arrives:—

In a state of health:—1. The serum of the blood holds in solution a substance which subsequently separates into albumen and fibrine. 2. The albumen and fibrine may be transformed, one into the other, by artificial means. 3. When fibrine is treated with a weak solution of soda at 40°, it loses its properties, and is changed into a substance which it is impossible to distinguish from albumen.

In inflammatory affections:—4. The fibrine is increased, the albumen diminished. 5. The increase of the former is equal to the diminution of the latter. 6. The quantity of the salts of soda is diminished. 7. On adding a small quantity of a solution of soda, we re-establish the normal proportions between the albumen and fibrine. 8. The serum of the blood is less alkaline. 9. The increase of fibrine depends on the diminished alkalinity of the serum.

In putrid diseases:—10. The serum is more alkaline than natural. 11. The fibrine is diminished, and this diminution depends on the increased alkalinity of the serum.

From the above we can deduce the theory put forward by M. Cohen. Fibrine is nothing but a normal excess of albumen in the blood, which the alkalies of the serum, saturated with albumen, are unable to dissolve. A diminution of the alkaline principles of the serum will, therefore, increase the quantity of albumen; or increase of the alkalies will diminish it, and *vice versâ* for the fibrine. The practical deductions to be drawn from the observations, if they be correct, are that alkalies are indicated in inflammatory affections, and acids in putrid ones.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

"ORTHODOX" SCHOOL OF MEDICINE.

After homœopathy, hydropathy, and other fantasies of a like kind, with which modern invention has endowed the science of medicine, one would have thought that the system-mongers had arrived at a stand-still. But, in this age of progress, every thing and every body are in movement. His Holiness himself has come out as the author of a new system, and announces the establishment, under his especial patronage, of an *orthodox* school of medicine. In former times, as you know, the priests cured bodies as well as souls. Perhaps the Pope intends returning to this good old fashion. As to finding a sufficient number of "orthodox" professors, even in Italy, to complete his new college, I fear that he is reckoning without his host. The object of the orthodox academy, we are told, is to combat the sensual doctrines of the last and present centuries, and it will be exclusively composed of men distinguished for the fervency of their Catholic faith. Henceforward, the "pathies" will give place to the "doxies."

MESMERIC MEDICINE IN PARIS.

In Paris, for the last few years, another system, heterodox both in faith and practice, has prevailed, and arrived at such a pinnacle of imposture, that the authorities have been forced to interfere, and put it down by the strong arm of the law. Need I say, that I allude to the practice of medicine by the somnambulists. It was, in truth, an agreeable profession, and withal easy, being practised for the most part by a number of young ladies, who, having been rejected at the Conservatory of Music, took up the art of "nervous and lucid clairvoyantes." Of nervousness, there was little, for a more brazen set of nymphs could not be found; but their lucidity was immeasurable; for, not content with seeing round a corner or through an iron pot, they looked into the other world, and held delightful conversations with your deceased parents.

All of a sudden, in fact, and as by miracle, was the art of somnambulism applied in the happiest manner to all the wants of society in general, and to medicine in particular. For the former the lady herself sufficed; for the latter she was aided, "horresco referens," by some young physician, who played the double part of accomplice and lover. For a long time affairs flourished. The fee was ten francs, and the number of curious "legion." Every one wanted to be informed about everything. For the trifling sum of ten francs were you cured of a mortal disease, or informed of the precise spot in which millions lay buried. "Dig deep enough," was the only condition annexed.

A *demoiselle*, named Virginie, is among the most celebrated of our somnambulists—chiefly consulted by our ladies in an interesting situation. It was she who announced the other day the delivery of Queen Isabella of a dead prince. The error, you see, was only one of time; but she made a still more grievous one since. One of our most celebrated dandies, who is, at the same time, a hunchback, consulted her the other day. The fluty voice of the dwarf led her astray, and laying her finger on the "bosse," she informed the astonished dandy that he was *enceinte*.

But the "forte" of these ladies is the discovery of thieves. For ten francs Mademoiselle Josephine (extra-lucid) will describe the man who picked your pocket.

With such a rare quality, thief-takers, lawyers, and judges became useless. It was an economy of several millions to the state. The Attorney-General got jealous, let loose his myrmidons, and caged all the aforesaid ladies, lucid, extra-lucid, and triple X-lucid, together with the medical men who had lent their names to the imposture. The latter are to be prosecuted as accomplices in swindling: the ladies for the illegal practice of medicine. One of the most remarkable, and not-to-be explained circumstances of this case, is that not one of the lucid ladies recognised the police magistrate who was charged with the duty of drawing up the *procès-verbal*, and then arresting the culprit. They were all seized in full consultation. One extra-lucid, indeed, mistook the commissary of police for a patient, and demanded ten francs, with a lock of his hair. Unluckily, the representative of the law wore a wig. Many medical men, of whom we had judged better things, are implicated in this unfortunate transaction, and, unless chance favour them, will be severely punished, for the scandal has been great. No one will regret their fate.

THE NEW LAW AGAINST THE PRESS

Has created great uneasiness amongst our medical booksellers, whose occupation will be sadly abridged below its present scanty proportions, should the Assembly persist in having all works, under sixteen sheets, submitted to a stamp, that is to say, to a stamp on every sheet. Ballière, the chief medical bookseller here, at the head of a most respectable deputation, waited on the Ministry, and made some very energetic observations, but apparently without the slightest effect. The Government and the Assembly have, by their own avowal, undertaken to kill the press. This laudable undertaking is, however, by no means so easy as they imagined, and, on reducing it to practice, they have been forced to begin by sacrificing the trades of bookselling and printing. It is almost impossible to conceive that any idea of the kind should not merely be conceived but executed in the middle of the 19th century; yet I fear the law will pass this very day. Terror has rendered our statesmen completely blind. If the law pass, all the medical journals will have to deposit a heavy caution-money, and be stamped. In addition to which, all works published in numbers—and most of the standard works now assume that form—will have to be stamped likewise, or, rather, will cease to appear; for the law is to have a retrospective effect, and no periodical publication could sustain the weight of the tax, which would amount to 100, nay, 300 per cent. of the value of the work. A great portion, it is supposed, of French periodical publication will be transferred to Belgium. None of the smaller journals can survive; and the publication of any work in parts, at stated periods, is rendered impossible. As the Protestant representative, Abbé Cocquerel justly observed, it is impossible to understand the motives which could have given rise to such a general confiscation of French literature. Luckily, complete works have not been touched yet, though, in matters of censorship, M. Carlier beats the index hollow. Little, however, is doing in the way of medical publication here. M. Blache, son-in-law of the late M. Guersent, announces a new work on diseases of children, from the notes of his father-in-law, enriched by his own observations. Old Guersent was a good practitioner, but the last man in the world to write a standard work on any subject. A distinguished man once said of him, that his skull seemed to be filled with stir-about.

Our learned societies have not been doing much this week. Like everyone else, indeed, the *savans* are enjoying the fresh air of the country, and abandon science during the dog-days. At the Institut, we have nothing save discussions on electric telegraphs and the laws of light. At the Academy of Medicine, the greater part of the meeting was occupied by a report on the "intellectual faculties of deaf and dumb persons." However interesting to the general reader the report of M. Gerdy may be, it contained little worthy of fixing the attention of practitioners.

SUCCESSOR TO M. DE BLAINVILLE.

The professorship of Comparative Anatomy, vacant by the death of M. de Blainville, has been conferred on M. Duvernoy, one of the professors at the College of France. It is a remarkable fact, that M. Duvernoy occupied, in 1808, de Blainville's chair at the Faculty of Sciences, but was obliged to resign in consequence of ill-health. He now, however, succeeds his successor.

IRELAND.

MEDICAL CHARITIES BILL.

Sir W. Somerville submitted the Medical Charities Bill to the House on the 12th inst., and again on the 24th. A good deal of sharp debate seems to have taken place, as there were three divisions on almost as many words in the Act. It was contended, first, by one section in the House, that the Bill was nothing but a new Poor-law Bill, which would clash with the ordinary Bill; and it was moved, as an amendment, that it be more completely assimilated with the Poor-law Commission arrangements in Ireland.

Sir W. Somerville dilated on the present very inefficient system of medical relief in Ireland, which was so objectionable, he said, that it required a remedy. The Board contemplated by Government was not exclusively a Medical Board. It was to consist of two competent persons, being physicians or surgeons, who, with the Commissioners and Assistant-Commissioner of Ireland, should form a Board for superintendence of Medical Charities in Ireland,—an arrangement, he was given to believe, that was satisfactory to the profession. Sir R. Ferguson moved there should be but *one* physician or surgeon on the Board, on the grounds of expense. Sir W. Somerville brought his forces to bear on this point, and demolished it by a majority of 40. The next division, the object of which was a little too transparent, was, whether the fortunate medical men should be of seven years' standing or ten; the former, of course, carrying the day. The Government opposed a somewhat unmeaning Motion, that the Poor-law Commission should be responsible for the doings of the Medical Board. This we are at a loss exactly to understand. If this was intended as a slight to the profession in Ireland, or to mean that our great grand jury people begin to feel their little domination going from them; the profession in Ireland must be benefited by any change; and, as to the professional members of the Board not being able to take care of themselves and the charge committed to their care, it is simply an absurdity. It is still doubtful whether the Bill will pass this year. The impression now more general is that it will.

The 8th clause, enacting that the *Commissioners* of health should divide the different Poor-law Unions into Dispensary districts, and that they should declare the number, qualifications, and salaries of the medical officers, has produced much discussion. The member for the University of Dublin objected to the powers with which the Commissioners were invested in the formation of districts. He wished *the Guardians* to have power to make representation of the subject to the Commissioners, that an appeal also should be made to the Lord-lieutenant. The general feeling of the House being in this direction, the amendment was agreed to without a division. Mr. Clements then proposed that the salaries should be fixed by the Boards of Guardians, and not by the Comsioners. Sir William Somerville opposed this amendment, declaring he had abundant reason for believing that it would be more judicious and economical to leave the question of remuneration to the Commissioners. It was then suggested the difficulty might be met by adding a proviso to the 10th clause, that in case of any salary being given by a Board of Guardians, which shall be considered by the Board of Health inadequate, the latter Board should have the power to arrange the matter. This suggestion did not give satisfaction; and it is well, as Mr. Clements's amendment was thrown out. The ultimate appeal to the Lord-lieutenant was also negatived.

The 9th clause was then agreed to. The Chairman reported progress, and obtained leave to sit again on the 25th.

IRISH BARDS AND SCOTCH REVIEWERS.

A paragraph with the above heading makes its appearance in the "Medical Press," calling attention very properly to a notice of a late surgical manual of the Dublin school in a Northern Review, in which the reviewer seems to make very small account of the common sense of his readers, in picking sundry faults, and bewailing the few new facts to be found in the work, adding quite complacently, that he has not read the book at all. He stumbles quite by accident, as if it came out of the moon, on one luckless paragraph, from which, by some divination, he discovers we are all in Ireland still under the baneful influence of the mercurial delusion in syphilis. In this Mr. Syme was never more mistaken in his life; if there is one thing beside perhaps compression in aneurism,—

thanks to Carmichael and Wallace,—thoroughly understood and properly practised in Dublin, it is the *non*-mercurial treatment of syphilis. It is to be hoped the affectionate lecture lately read by the *Medical Times* to good old "Alma Mater" in the north, and the meeting there next month of the different wise men from the east, will have some effect in softening down the thunders of the *Medico-Chirurgical* "Mons Meg." Everybody of course must respect the Edinburgh school for what it has done; it is quite melancholy, however, to find our friends evermore, like Touchstone, "breaking their shins" against their superabundant wisdom. That all cases of constitutional syphilis will get well without mercury is perhaps as dangerous a dogma as that every simple case will require the mineral. If Carmichæl and Ricord preach up with no little ability the non-mercurial plan, they are to be looked on perhaps as putting the thing in the broadest light it will bear; every one's experience must tell them it is so. To follow the doctrine *à l'outrance* with men of more limited experience, from some particular conceit, would be very unwise indeed.

LIVERPOOL.

POOR-LAW MEDICAL OFFICERS.

The select vestry have been busy at work with the Poor-law medical officers, and though nothing important has been done, the discussion is to be resumed as soon as Dr. Duncan, the medical officer of health, has recovered from injuries received by a fall from a spirited horse. Liverpool is divided into thirteen districts, and for each district is a medical officer, who is paid a sum for attendance on all pauper cases; but in cases of labour, vaccination, &c., he sends in a separate account. The select vestry have found this mode too expensive, and are determined to discuss the question, whether it is not expedient to reduce the districts to twelve, and fix the salary of each officer at 150*l.* per annum; such salary to include all out-door duties, but not the supply of drugs, which are to be provided at a parish dispensary, as at present? A resolution to the effect of this change was made by Mr. Willmer, but it was opposed by Mr. Hodson, on the ground that the medical men had a claim, under a contract ratified by the Poor-law Board, for a permanence of the present arrangement. Whether Mr. Hodson's argument be valid, I do not presume to know; but, if any arrangement be made different to the present, it appears to me that it would be better to have an increase of districts, as well as an increase of medical officers, and to fix the salaries in accordance with the duties they would have to perform. If this suggestion was accepted, and acted on, I have little doubt that the poor would be better attended, and the vestry better satisfied. I only know, however, one objection to the plan of fixing the salaries, and that is, the circumstance that medical officers are likely to give themselves far less trouble than they do under the present arrangement; and this objection I would have the select vestry calmly consider. It is dangerous to interfere with anything that is going on well, for fear of making it worse.

GUANO.

At a meeting of the Health Committee last Thursday week, there was a discussion on an alleged nuisance from guano. One medical man contended that the smell was injurious to health, while another, strange to say, opposed that opinion, and with the conviction that his opinion would be confirmed by many medical men in the town. If the latter opinion was correct, I cannot see that it is even necessary to have a health committee, or a department for the removal of nuisances.

SANITARY ARRANGEMENTS AS TO LODGING-HOUSES.

While on this subject, I may refer to the excellent regulations with respect to lodging-houses, in which it is compulsory to have these houses well aired and well cleaned, as may be seen on looking over the rules and regulations suspended on the walls. So far, I think the Health Committee have done well; but I think that it ought to be made compulsory to remove all bed-curtains, and everything suspended likely to become contaminated with noxious matters constantly flying about in these places. Nay, more, that every bedstead ought to have the long posts shortened, to prevent curtains being suspended unknown to the inspector. In addition to this, I think it would be expedient to have the system carried out in all houses below a certain rental, as in such houses there is a mass of filth and foul air collected, undreamed of by the better class of persons. I feel fully persuaded, that the sanitary regulations are not near so much carried out as they might be, though what has been done is not to be despised.

WEEKLY RATE OF MORTALITY.

The number of deaths for the week has been 185, against 180 in each of the previous weeks, and 230 (deducting cholera) in the corresponding week of 1849. The deaths in the borough were 143, and in the extra townships, 42; from diseases of the lungs, 50; and zymotic complaints, 59. The temperature of the week had been below the average, the mean being 60°; the mean of the barometer was 30·6, being above the average.

YORKSHIRE.

SHEFFIELD SCHOOL OF MEDICINE.

Dr. Bartoleme and Dr. Elam, Mr. Martin, Mr. Porter, and other of the lecturers, have resigned their professorships in the Sheffield Medical School, the condition of which has long been far from satisfactory. How comes it that in a town of 140,000 inhabitants such a state of things is suffered to exist? Are there no men in Sheffield willing and able to form a school worthy the profession of this large and important town? It is well known that, as a body, the professional men in Sheffield are not behind any town in the kingdom, and some of them enjoy a considerable literary reputation. We hope soon to record the dawning of a better state of things. Most gladly shall we hail the establishment of a school really efficient. The state of things which has forced the above gentlemen to retire cannot longer be permitted to go on. We hope to be at Sheffield again in a few weeks, and shall then probably be enabled to report better things.

HOMŒOPATHY IN HIGH PLACES.

It being reported in Halifax and the neighbourhood, by the homœopathists, that Dr. Holland, Physician Extraordinary to the Queen, is treating homœopathically the Royal children, it would be interesting to the profession generally to know if such a report is correct, and to ascertain the facts from Dr. Holland himself, as, if the report be unfounded, he cannot object to a public refutation of it; and, if correct, Dr. Holland must be a conscientious disciple of Hahnemann, and cannot therefore object to an avowal of his opinions.

[We publish the above paragraph, in order more effectually to give the most unqualified and indignant contradiction to the very scandalous report. Dr. Holland is an eminent and distinguished physician, and one whose views have been too well known and respected by the profession, for the last thirty years, to allow the breath of suspicion to tarnish, even for a moment, his bright professional conduct. Moreover, Dr. Holland has never yet visited the Royal children. Such an infamous report, therefore, must have originated with wicked and designing men, and been propagated for purposes of deception, and to support as great a fallacy as was ever yet conceived.

Sir James Clark is the Physician in Ordinary to the Queen and to her family; and we most unequivocally assert, that, so long as he holds his high and distinguished position, none but good and sound practice will find access to the Palace.—Ed. *Med. Times.*]

St. Thomas' Union, Exeter.—The Boards of Guardians are carrying out their paltry savings by docking the salaries of those employed by them. In St. Thomas' Union, Exeter, the house-surgeon's salary is reduced from 65*l.* to 55*l.* a year. Those of the district surgeons are raised in amount, but no extras to be allowed except in midwifery cases. The Board expects to save 50*l.* a year by these discreditable means? What are the profession about to allow this?

GENERAL CORRESPONDENCE.

ADVERTISING SURGEONS.

[To the Editor of the Medical Times.]

Sir,—I observe that in the last number of your journal, at the termination of an article headed "Chloroform," you allude to the case of a patient of mine, on whom Professor Syme performed his operation of perineal section, without the patient having derived any permanent benefit therefrom. You are therein pleased to speak of me as "Mr. Courtenay, of advertising notoriety." Will you, therefore, inform me upon what grounds you feel yourself called upon to refer to me in so offensive and unusual a manner? Is it from the circumstance of my work on "Stricture" being advertised in the daily papers, as well as sometimes in your own journal? If so, allow me then to ask you why, if you desire to maintain the character of an impartial journalist, when you have occasion to speak of Messrs. Guthrie, Stafford, and Wade, you do not couple their names with their "advertising notoriety," to use your own phrase, in the newspapers, seeing that the two former have, for *more than twenty years*, had their works on Stricture and Urinary Diseases advertised, with more or less regularity, in the daily and weekly newspapers; whilst the last-named gentleman's work may be seen advertised in all, or nearly all, newspapers with perfect regularity. These gentlemen are all members of the College of Surgeons, and have, for years past, more or less advertised their works in newspapers. So am I a member of the same College, and, like them, I have advertised my work in the newspapers. Such being a plain statement of the facts, will you explain the difference, and why, if these gentlemen may do all this for years, and be exempt from offensive remarks, I am selected as the object of your somewhat indirect sarcasm? I mention these gentlemen's names from no feeling of disrespect to them personally, but merely because their works are on the same diseases as my own. I would now call your attention to a fact that can, however, scarcely have escaped your notice—namely, the long list of medical and surgical works, as well as isolated advertisements of special works, on every variety of disease, which are constantly inserted in all the daily papers, with the names, titles, and honorary distinctions of their different authors duly set forth. I am old-fashioned enough to think what is sauce for the goose should be sauce for the gander. I would therefore ask you if you are prepared to speak of these gentlemen as you have of me. If you are prepared to mete your censures out to *all who, directly or indirectly*, advertise their works in newspapers, I, of course, can have no right to complain at receiving my portion of them. If you are not, it is surely hard that you should cast your shafts at me, a simple member of the College, for only following an example set me by one who was President of the College when I was admitted a member, and by another who is a member of the Council of that body.

I have only to add, if you have any charge to bring against me of general incompetency or malpractice that should render me unworthy of that confidence which I have hitherto so largely enjoyed, I invite you to make it in a distinct and manly manner, and I promise you I will afford you every facility to prove it. On the other hand, if you are not prepared to act in so open a manner, I would recommend you, for your *own* character's sake, not to make cowardly insinuations, and thus seek to injure indirectly one whom you have not the courage to strike at openly. I presume you will give insertion to this my answer to your offensive remark, that your readers may judge for themselves from this statement, as well as from any explanation by which you may choose to accompany it, how far it applies to me more than to other members of the profession.

I remain, Sir, yours obediently,

F. B. Courtenay.

2, Chandos-street, Cavendish-square, July 17th, 1850.

[As regards the respectability of advertising works written upon syphilis, strictures, secret maladies, self-preservation, in the daily general journals, which pass into the hands of almost all the members of private families in this country, we have but one opinion, and that opinion is shared by all who value decency.

We spoke of Mr. Courtenay, "of advertising notoriety," for the purpose of indicating that particular "member of the College of Surgeons," whose name is so familiar to us in a certain corner of the daily prints. We wish to give credit where credit is due, and not to allow his reputation to be shared by others of the same name. There is no better proof of the correctness of our remark than that Mr. F. B. Courtenay at once gracefully acknowledges the compliment. Perhaps, if we had occasion to speak of some others we might, for the purpose of distinguishing them from those bearing the same name, call them also, with Mr. Courtenay, members of the surgical profession of advertising notoriety.—Ed. *Med. Times.*]

THE BRITISH MEDICAL FUND.

[To the Editor of the Medical Times.]

Sir,—In your last number you have quoted from the *Observer*, that the British Medical Fund "is an instance of one of the thousand forms in which the idea at the root of all Socialism is gradually, unostentatiously, and most usefully working throughout all English society." You observe, that this is "equivocally expressed; to English ears, all connexion with Socialism has an ungrateful sound." If, however, there is a great truth in the idea, it must last, and will shine through the error which has been hung over it.

The idea which lies at the root of Socialism seems to me to be the union and co-operation of each for the common good of all, rather than the single advantage of each by competition. To illustrate this from our own profession, I will take extreme cases.

One medical man looks at his own success as the sole object of life, without regarding others. He throws over his medical neighbour whenever he can; he runs him down; he talks against him; he views him as an opponent; he is annoyed at his success; he undersells him by taking less fees, or by taking clubs and parishes at a lower rate. His motto is, consciously or unconsciously, (though neither engraved on a seal nor painted on a carriage,) "*Every man for himself.*" By selfish competition he hopes to rise.

The opposite example is the man whose motto is, "*Live and let live.*" He endeavours to act towards his medical brethren as he would wish them to act towards him. He never allows himself, by word, deed, hint, insinuation, or look, to depreciate them in the eyes of others. He never takes any step to secure a patient who has been attended by another, and, if such a patient seeks him, he has been no party to the change, and he is the more careful of the reputation of his predecessor. His endeavour is to promote unity and good feeling among his brethren,—to co-operate with them for the general good of his profession, and he looks at his own good as a part of the general good, and only to be advanced in that direction. He has no opponents. He feels irritation at other men's success. His idea I take to be the true idea lying at the root of Socialism—mutual co-operation for mutual good. The British Medical Fund is a branch of this great idea, and those who watch closely the workings of society, must see the idea has taken root, is growing, and will be more important than any mere political questions. It supposes, in fact, that *social* questions are more important than political ones.

To return, however, to the two examples, and to test them by success. Let any one who has twenty years' experience of his profession look back, and ask himself which men of these two classes have succeeded best. If success means a real addition to a man's happiness,—if it includes the good will and kindly feeling of his fellows, a quiet unirritable mind, an easy conscience, a genial disposition, generosity, magnanimity, the respect as well as the affection of those by whom a man is best known,—if success comprises these, in addition to a comfortable allowance of the material good things of life, there can be no doubt at all,—even measured by consols, money on good securities, houses, land,—I think there can be no doubt, (other things being equal, such as skill, talents, and manners,) that the latter will beat, and over-beat, the former specimen out and out in the long run. The most successful physician of his day, (or, at least, second to none,) a man who could leave his practice for months, and still find his consulting-room full of patients on his return; who has gained rank and fortune by his profes-

sion, is in the habit of attributing his success to having invariably treated his medical brethren well.

There is, undoubtedly, a great difference between the idea of Socialism thus stated and the actual Parisian experiment; and the difference is as great as between true liberty and the Parisian mode of carrying it out. But abuse is no argument against use, and the Socialism here advocated is not Red Socialism but Christian Socialism, carried out by men relying on the truth of Christianity.

I am, Sir, your obedient servant,

B.

POST-MORTEM CÆSAREAN SECTION.

[To the Editor of the Medical Times.]

Sir,—In the last number of your journal, you requested me to favour you with a distinct statement as to how long I waited after the death of the mother before performing the Cæsarean section. I may say, that the operation was begun as soon as I was satisfied that the patient was really dead; as to the exact number of minutes that elapsed from the time she ceased breathing till the operation was performed, I cannot, at this time, precisely say. I do not think she could have been dead more than three or four minutes. But I am almost certain, that, had the child been allowed to remain *in utero* much longer, all attempts at resuscitation would have been fruitless; for, on extraction, the child (as stated in the *Edinburgh Monthly Journal*) "was, to all appearance, quite dead, no pulsation being felt either at heart or cord;" and it was not until I had kept up artificial respiration for some time, that the infant showed any signs of life. Water, friction, aqua ammoniæ, &c., seemed to have no effect.

I am, Sir, your very obedient Servant,

George Harley.

Royal Maternity Hospital, Edinburgh,
July 19, 1850.

[To the Editor of the Medical Times.]

Sir,—In reference to some questions upon the subject of Cæsarian section after the death of the mother undelivered, proposed in the *Medical Times* of last Saturday by Mr. Gibbons, of North Dispensary, Liverpool, I have the painful satisfaction in being able to inform your correspondent that a case of apoplexy, lately occurring to a patient at the full period of pregnancy, gave me the opportunity of testing the practicability and the propriety of dispensing with the Cæsarian section in such cases altogether. In the case in question, both mother and child were dead before my arrival at the house; but I availed myself of so favourable an opportunity of ascertaining whether it were practicable to deliver by the natural passages, and I have no hesitation in pronouncing upon the practicability of extracting a living child, provided I were present at the death of the mother. If more minute detail is wished for I shall have pleasure in giving a copy of such notes of the case as I may be in possession of.

Gringley, July 16, 1850. H. Raynes.

[We shall be glad to receive our correspondent's notes for publication.—Ed. *Medical Times*.]

WYCOMBE GUARDIANS AND MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

Sir,—A few of the guardians of the Wycombe Union have been for some time strenuously endeavouring to effect a reduction of 10 per cent. in the salaries of their medical officers, and, as it may prove interesting to the medical public to know the steps which the officers took to prevent it, and the final result of the measure, I will, with your permission, give a concise statement thereof. So soon as it had transpired that the guardians had determined upon the reduction, and had submitted it for the approval of the commissioners, my friend Mr. Turner, surgeon, and I, directly called a meeting of the medical officers of the Union, and the meeting unanimously resolved to memorialise the Poor-law Board, praying them not to sanction the reduction for several reasons, which were specified. In a few days after, the commissioners returned a reply to the guardians, refusing to sanction the reduction, adopting, as their reasons for not acquiescing in the views of the guardians, the precise reasons which we submitted for their consideration in our memorial, namely, that the guardians did not raise our salaries in the year 1847, when corn was at a famine price,—the present low price of corn being the only plea which the guardians had for the reduction,—and that the salaries were at present as low as was consistent with anything in the shape of remuneration.

The guardians being thus summarily expelled from Somerset House, I may here just mention, as it will show the *esprit de corps* which impelled them to gain their point, they next appealed to each parish in the Union to have the opinions of the rate-payers, but, not receiving favourable replies, they next petitioned Parliament, and all to no effect.

Being thus put *hors de combat* on all points, they determined, as a *dernier ressort*, to take the law into their own hands, and administer it after their own fashion, so they issued circulars to each officer, stating, that as his present year of contract would expire on the 31st inst., they wished to be informed before the 13th inst. whether he was willing to continue his attendance on the poor of his district for the ensuing year at a reduction of ten per cent. on his present salary. After the receipt of this circular the medical officers again met, and unanimously refused to renew their contracts on these terms. A letter to this effect was addressed to the Board of Guardians, signed by each of the officers.

When the day of meeting came, (13th inst.,) the chairman read this letter. Lo! what consternation,—yea! what amazement!—every word of it created, as the chairman, falteringly pronounced its firm and absolute refusal to the guardians' proposition. This *lex talionis* threw them on the horns of a dilemma, and their *primum mobile* exclaimed, *ex cathedrâ*, "it's a confederation on the part of the medical officers, and we won't be beat." But one of the guardians, who evidently knew more of Poor-law than the Chairman, naïvely wished to be informed who were to attend to the poor in the meantime, as, if the present officers continued their attendance, they could legally (a) charge them, the guardians, the usual fees, &c., for their attendance on the poor, until new officers were appointed, which they are in the habit of charging their private patients, as they would really be attending them as such, having now no connexion with the Board. "Humph!" says the Chairman. "Is that the law," exclaimed two or three voices. However, the opposing clique were determined at all hazards of being furnished with half a dozen 50*l.* bills from as many medical officers, to carry their point, and consequently divided the Board on the question, when there appeared 6 *pro* and 10 *con:* majority of 4 against the reduction of 10 per cent.

The above teaches medical officers to be united, like Æsop's bundle of sticks, if they wish to prove their strength and gain their rights.

I am, Sir, yours obediently,

Stokenchurch, July 18, 1850. H. Hastings, M.D.

OPERATIONS ON HARE-LIP.

[To the Editor of the Medical Times.]

Sir,—I find that a discussion has lately been carried on both in Dublin and Paris, respecting the period at which it is most proper and advantageous to operate for hare-lip. Opinions in both cities are in favour of operating very early. In this country, however, I am not aware that surgeons generally are in favour of performing this operation at a very early period; they are, I believe, mostly inclined to defer it until a somewhat late date after birth. The reason for this probably is, that the late Sir Astley Cooper and Mr. Liston expressed strongly their opinions against operating when the infant was very young. Sir Astley brought forward a long list of cases where convulsions ensued and carried the patients off, and he advised his pupils not to interfere until the child was two years of age. Mr. Liston was in the habit of joking about the "bungling jobs" which the "obstetric practitioners" made by operating upon infants, and strongly urged us not to operate for some months after birth. Mr. South also says, "I would never perform it before two years old."

One of the first points, if not the very first, of surgical practice which my old teacher, Mr. Fergusson, impressed upon my mind, some seven years since, was this very subject of

(a) Hyett *v.* Guardians of Cheltenham Union.

operating early on hare-lip. From this period I have seen a vast number of cases operated upon, chiefly in his hands, and many of them have been very young infants, and the results have been very successful. I have, however, never known him operate on a child younger than a fortnight old; but I have heard him say that he would not object to do so immediately after birth.

My friend Mr. Marshall, of Greek-street, requested me, on Thursday, June 27, to operate on an infant which had been born only the previous Monday. Acting upon the doctrine above alluded to I acceded to his desire, although the child was small and weak, being unable to suck; the deformity was very bad, the fissure running through the soft and hard palate and nostrils, a considerable protrusion of the alveolar border of the upper jaw existing as well; the gap was at the same time very wide, and I found it necessary to dissect the lip up from the gum very freely on each side. Very great care was taken that the child should lose the least possible amount of blood. The case has turned out admirably, and, although the little creature seemed to feel the shock of the operation for the first few days, it has now quite recovered, and is a healthy-looking well-nourished child. I send you this case because I have never seen the operation performed so early, nor has it occurred to me to find the record of any particular instance in which it was performed so soon after birth, in this country at least.

Yours obediently,

Caroline-street, Bedford-square. HENRY SMITH.

AUTHORS' MUTUAL EXCHANGE SOCIETY.

[To the Editor of the Medical Times.]

SIR,—I believe it is well known, that, at the present time, very few published medical works are directly remunerative to their authors, but rather the reverse; (a) and that many copies of valuable books are printed which never leave the publisher's shelves, or only do so very slowly. It appears to me, that, by establishing a well-regulated system of mutual exchange, medical authors might reap much more and immediate benefit from their publications than they now do; and that this might be done in such a manner as to benefit not only themselves but their publishers also. With this in view, I beg to enclose the brief outline of a plan for an "Authors' Mutual Exchange Society," to be submitted, if you think well, to the judgment of the many readers of the *Medical Times*.

It will afford me much pleasure to enter into communication with any to whom the plan may appear feasible, and who may be inclined to co-operate in bringing it forward. A glance at the outline will show that an author could only derive benefit from the mode of exchange proposed, in proportion to the demand for his work, which would, doubtless, be regulated by its merits, and *vice versâ;* in fact, that the relative positions of superior and inferior would not be altered in the least degree, and that no inducement would be held out, either to print or to push in a work merely for the sake of exchange.

AUTHORS' MUTUAL EXCHANGE SOCIETY.

Members.

A Committee and Secretary.

Each member, on joining, to pay a small subscription (say 5s.) towards expense of printing, postage, &c.

Each member to send the name or names of his work or works to be exchanged.

A catalogue of the members' names and works to be printed and distributed.

Each member, within a certain time after receipt of the catalogue, to make out, and transmit to the Secretary, a list of his desiderata, arranged in the order of desirability.

After the receipt of the lists, the orders for the work or works of each member to be computed.

Works to be allotted to each member in proportion to the amount of his own work ordered.

The different works to be valued according to their regular sale price; each member paying to the publisher the usual commission upon the numbers of his work thus disposed of.

SPENCER THOMSON, M.D., &c.

Haunton, July 10, 1850.

(a) "Isolated essays and pamphlets, particularly on professional subjects, seldom sell well."—Review of Hamilton on Syphilis. Brit. and Foreign Med. and Chirurg. Review, July, 1850, p. 72.

THE LONDON SOCIETY AND SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—As a public meeting is called by advertisement for the 29th instant, to explain the objects and extend the operations of *The London Society* for promoting the establishment of *Self-supporting Dispensaries*, will you permit me to state the principles of the plan suggested by Mr. Smith, of Southam, the founder of these institutions, and the Chairman of the Council.

I cannot doubt that the objects of the London Society will bear any investigation, and that *ultimately* they will be cordially supported by the profession at large. Nevertheless, its promoters are anxious to remove any scruples, and to answer any objections that may be entertained. They are especially desirous that its constitution and aim should meet the early concurrence of the members of the profession to ensure the prompt extension and due efficiency of the operations of the society.

Allow me, therefore, to submit, that Mr. Smith's plan divides the people into three classes.

1st. Those who are able to pay the usual charges for medical attendance.

2ndly. Those who are willing to contribute within their means, but are unable to pay the usual charges.

3rdly. Those who are unable to contribute anything, or who are unwilling.

The second class comprises a large body of the people who "are mostly in a condition in which, under the present system, they must either act dishonestly, by incurring medical bills which they know they can never pay, or they must lose their independence, and descend into the ranks of beggary, by soliciting a charity ticket to some honorary dispensary; or, still worse, by applying to the relieving officer for a parish order; or they may take quack medicines, or obtain medical advice from druggists. Many, again, have too much intelligence, and too great a feeling of delicacy and independence, to submit to any of these degrading alternatives, and frequently die without any assistance whatever!"

Such is the general condition of this class when suffering from illness, and such are the deplorable social and moral effects of the system of indiscriminate charity, arising chiefly from the impossibility of their paying the usual charges for private medical atendance. Mr. Smith says, "The experience of twenty-six years has proved, that wherever the plan of providing medical aid within the means of this class has been tried, it has proved successful, and all the good expected to the people and to the profession from such a plan has been fairly realised." By weekly contributions of about 1 per cent. of their earnings, the humble and industrious classes, who must otherwise seek relief from private or public charity, or linger in unalleviated suffering, are enabled to command, as a right, the best medical attendance in the neighbourhood, (for it must not be overlooked, that a self-supporting dispensary, when started, is thrown open to the entire profession of the district, and hence the distinction betwixt self-supporting dispensaries and mere medical clubs,) and it cannot be questioned that, to the members of the profession, the saving of time, from the conveniences and facilities afforded by the concentration of such societies, and the *certainty* of some payment, however inadequate, for their attention and skill, are worthy of their serious consideration. As to the objection, that persons may be admitted members whose earnings would enable them to pay the full charge for medical attendance, it is answered by the fact, that the subscriptions are regulated by the rate of wages received, and that a limit is fixed beyond which no one is to be admitted as a member. And, with respect to the returns for medical attendance in such societies, Mr. Smith observes, "that one penny per week from each of 100 persons will give an income of 21*l.* 13s. 4d. per annum,—a sum fully equal to pay for medical advice of the highest class. It is probable that 100 average adults may not have three months of confinement to bed among all of them in the year, and a few may require simple doses of medicine, which will often ward off more serious attacks." So far, therefore, as respects the condition of the labouring poor and the interests of the profession, there appears to be no just ground for objection to the establishment of such societies wherever practicable.

The "London Society" has a task worthy of the general support of all who wish well to the moral and physical con-

dition of the industrious classes. It will, no doubt, on consideration, be admitted, that these self-supporting dispensaries are the best antidote to the abuses which notoriously exist in the management of the many hospitals, dispensaries, and infirmaries, which are open to persons who can well afford to pay for medical attendance, to the utter perversion of the charitable intentions of their foundation. They will have the effect of diminishing the burden of the Poor-rates; for thousands of the labouring classes are made paupers, and continue paupers, from first being compelled to have recourse to parish medical relief, never being able afterwards to lift up their heads in the pride of independence. Pauper medical relief may also, under proper regulations, become an object to these societies when extended throughout the kingdom. Many of the evils and disadvantages of the present system of farming the sick-poor would be averted through the instrumentality of these *Self-supporting Dispensaries*. It must also be admitted, that habits of forethought and economy are fostered, and the sense of independence is stimulated by these associations. The free members have the choice of their medical attendant among the professional staff, (composed of all the medical men of the district disposed to join,) and, in cases of emergency, have the advantage of the combined medical talent of the institution in consultation.

I fear to encroach too much on your space, and will, therefore, conclude, by repeating, that Mr. Smith's plan for the founding and management of these societies has been successfully tried at Derby, Northampton, Burton-on-Trent, Coventry, and many other places; and that the unanimous admission, by the members of the profession, of the *enormous abuses* of the medical charities, will justify my urging the adoption of the Self-supporting Dispensary plan, as affording a remedy for the evils complained of, while it extends many valuable blessings to the industrious poor.

I am, Sir, your obedient servant,

THOS. D. HAWKER, Secretary.

THE PROSTATE AS THE SEAT OF OBSTINATE GLEET.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* of the 15th instant, I see that Dr. Johnson, of Baltimore, is of opinion that the prostate is the seat of obstinate gleet.

Having at the time nearly completed the following particulars on that head, with the intention of forwarding them to your journal, I now hasten to do so. About one year ago my attention was directed to the inefficacy of the usual means employed for the relief of gleety discharges. I was led, from a case which I then had under my care, to attribute such discharges to chronic inflammation of the prostate gland consequent on a previous attack of gonorrhœa. In support of this hypothesis, I will briefly particularise a few cases.

Case 1.—Mr. W., aged 34, of a plethoric habit, sanguine-nervous temperament; his previous health has been very good. Six years ago he contracted a gonorrhœa, which I treated, whilst a pupil, with pulv. cubeb et alumen and an injection of argent. nit. gr. iij. ad ℥ij.; in about three weeks he was quite well. I again saw him about a month afterwards, at which time he continued free from any return of the symptoms. Four years after this, he applied to me again with a discharge, from which he had been suffering for more than three years, in spite of the various modes of treatment adopted by several surgeons under whose care he placed himself. The discharge from the urethra was a watery gelatino-purulent matter, increased in quantity by any exertion, or the use of stimulating fluids, yet not accompanied by any pain whilst urinating, no febrile symptoms; urine healthy, both in quantity and quality. I considered it a case of simple gleet, caused by some irregularity in his habits; but this he denied, stating that in the interval between the cure of the gonorrhœa and the appearance of the gleet, he had been very temperate—had not had connexion with any female but his wife, whom he married six months after the gonorrhœa was cured, and just before the appearance of the gleet. I advised the use of a variety of injec- such as hydrar. bichlor., acid. tannic., argent. nit., zinci. acet., &c., all of which he used for various periods, extending together over about eight months, without any improvement. He now began to complain, for the first time, of a sense of heaviness in the perinæal region, with difficulty in passing his urine. In attempting to pass a catheter into the bladder, I found that it would not pass beyond the prostatic portion of the urethra without causing very great pain. Upon examining the prostate per rectum, I found it much increased in size, and abnormally sensitive to the touch. Considering from these symptoms that the discharge might arise from some local inflammation, and acting according to the axiom of "*anceps remedium melius est nullum*," I prescribed the application of two leeches to the perinæum, repeated every five days, for three applications. As he resided in the country, I had not an opportunity of seeing him until the prescribed number of leeches had been applied, at which time the discharge and sense of heaviness were gone; he passed his urine without difficulty. A catheter could now be easily passed into the bladder; still the gland was a little above the normal size, and not quite free from tenderness; also, after the free use of stimulating fluids, the discharge would return with the other symptoms. Again I advised two more applications of the leeches, and a weak injection of plumbi acetas to be used three times in the day. Since the application of the leeches, and the use of the injection, all the symptoms are gone, a large catheter can be passed with ease into the bladder, and the use of stimulating drinks does not cause any return of the symptoms. Up to about a month ago (when I last saw him) he continued quite well, free from discharge, pain, or difficulty in urinating.

Case 2.—Mr. M., aged 30, a man of rather delicate habit, of a sanguine-bilious temperament, consulted me about eight months ago for a urethral discharge, increased by any exertion or exciting fluids. The following is the history which he gave me of his case. About twelve years ago he had gonorrhœa, which was cured in about four weeks. Shortly after this he was married, and lived very temperately. In about eight months from the cure of the gonorrhœa, he noticed a slight discharge after walking or drinking fermented liquors (which he very rarely did); also he found the discharge most abundant in the morning; no pain on passing his urine. For near twelve months he took no notice of it, and continued to have connexion with his wife, without any consequences. He now began to have some difficulty in passing his urine; the stream was forked, and, at times, would stop for an instant. In consequence of these inconveniences increasing, he consulted a surgeon in Birmingham, who passed a catheter, gave his opinion that there was a stricture in the lower part of the urethra, for the cure of which he advised the regular use of a bougie: this was attempted several times, but could not be passed into the bladder, in consequence of the severe pain which it caused, and the hæmorrhage which attended "every attempt to get the bougie beyond the neck of the bladder," as the gentleman stated (meaning, no doubt, the prostatic portion of the urethra). Notwithstanding these consequences, the use of the bougie was continued for some time; and the day after each attempt the urine passed more freely, and the discharge was less. On the second consultation, the surgeon recommended the use of the bougie to be discontinued, in consequence of the hæmorrhage which it caused, and prescribed the use of injections, which were continued for seven or eight months, without any improvement. As business now called him to London, he consulted an eminent surgeon there, who, at the time, attempted to pass a small catheter into the bladder, in which he failed; still this attempt caused considerable hæmorrhage. He prescribed the use of tonics and the occasional passage of a bougie. This plan of treatment was rigidly followed for some time, without any benefit, except for a short time after the passage of a bougie, and the hæmorrhage consequent upon it. During the whole twelve years he has been constantly under one medical man or another, all of whom have tried various modes of treatment, yet trusting principally to the use of bougies or catheters, without any permanent benefit.

When he consulted me he appeared much debilitated: this he attributed to the hæmorrhage and the discharge; complained of neuralgic pain in the neck and head, much increased after sexual connexion; pulse full and weak; tongue coated with a white loose fur; bitter taste in the mouth every morning; appetite various; bowels constipated; fæces hard and flattened; thirst moderate; urine pale, slightly acid, sp. gr. natural, containing a few spermatozoa and pus globules; it is passed with difficulty, and in a forked stream; from the urethra there is a constant discharge of a gelatino-

purulent matter, which also contains a few spermatozoa; the discharge is more abundant in the morning, and increased by any exertion; sexual desire intense, and seminal emissions are produced only after a protracted connexion,—yet after such exertion the neuralgia and discharge are increased for a day or two. Upon passing a catheter into the urethra, I found an obstruction at the prostatic portion; and upon using only very moderate force, severe pain was felt in that region, and the withdrawal of the catheter was followed by slight hæmorrhage, amounting to about ʒij. per rectum; the prostate was felt to be enlarged and tender to the touch. I ordered an injection of tannic acid, and refrained from passing a catheter for three weeks, at the end of which time the discharge was slightly increased, and urination was more difficult. I now prescribed the application of two leeches to the perinæum every four days, with cold bathing. After the third application of the leeches the discharge was less, and the urine was passed in a much better stream. The same treatment was continued, with the occasional use of an injection of infusion of matico; and in six weeks from the first application of the leeches the discharge was quite gone; the urine passed in a full stream without difficulty; a prostatic catheter could be with ease passed into the bladder, and not followed by hæmorrhage. After a short residence at the sea-side, and with the use of tonics, all the neuralgia left, and his general health improved very much. Although some months have now elapsed since the discharge ceased, and the remedies were discontinued, there has not been any relapse.

In addition to the above cases I have had three others with similar gleety discharges, which had resisted the actions of various remedies for periods extending from eight months to five years, and consequent on a previous attack of gonorrhœa, all of which have yielded to the application of leeches to the perinæum, and cold bathing. With these facts before me I think I am justified in concluding that many of the so-called gleety discharges have their *fons et origo* in chronic inflammation of the prostate gland; and, if such be the fact (which, however, can only be settled by a numerous collection of cases), we can see why the simple local depletion should be so beneficial to the cases which I have recorded; also it proves that the usual remedies prescribed for such discharges are not at all likely to be followed by that success which otherwise might have been hoped for.

I am, Sir, Yours truly,

J. Ogden Fletcher, M.R.C.S., Eng., &c. &c.

Dale-street, Manchester.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

B. Phillips, Esq., Treasurer, in the Chair.

(Concluded from page 48.)

RETENTION OF URINE IN THE KIDNEY FOR NINE DAYS.

By A. W. GABB, Esq., M.R.C.S.

(Communicated by H. BENCE JONES, M.D., F.R.S.)

Mr. C. T., 55 years old, was suddenly taken with pain in the left side, and vomiting, on the night of March 23.

On the 25th, he had excessive pain and tenderness of the abdomen, and the urine was scanty. The bowels obstinately constipated.

26th.—He passed about an ounce of water at six in the morning.

27th.—Constant desire to make water; but when the catheter was passed into the bladder, no urine was found there.

28th.—Slight delirium; profuse perspiration; return of the sickness.

29th.—Still no urine; sickness less.

30th.—Increase of pain, and return of sickness.

31st.—Less pain and sickness, but no urine.

April 1st.—Catheter again passed, but no urine found in the bladder. Three pints, at least, of darkish-brown fluid, not smelling like urine, but looking like bile and water, vomited.

2nd.—Sickness and faintness continued.

3rd.—Hiccough; great drowsiness, with delirium and sickness.

4th.—Four a.m.—Great increase of pain, and suddenly he passed about two pints of clear urine, and a very small stone, which consisted of oxalate of lime, and did not weigh half a grain. (It was shown to the society, but it was so small that it could hardly be seen.)

After this he had a rather troublesome attack of diarrhœa, which lasted three days; the consequence perhaps of the medicines that had been given.

"On the 12th he was out, and remained well on the 3rd of June. In this case, for nine whole days, no water whatever was passed, and, for three days previously, a very small quantity of urine was excreted.

CASE IN WHICH THE URACHUS REMAINED OPEN,

AND A RING-SHAPED CALCULUS, FORMED ON A CURVED HAIR IN THE BLADDER, WAS EXTRACTED THROUGH THE UMBILICUS.

By THOMAS PAGET, Esq., F.R.C.S., Surgeon to the Leicester Infirmary.

(Communicated by WILLIAM BOWMAN, Esq., F.R.S.)

J. C——, aged 40, had suffered for more than a year from frequent and painful micturition. On sounding, a calculus was readily detected. He mentioned that, upon attempting to make water, and during violent efforts at work, a portion of the urine sometimes escapes at the navel, which is open, and, as far as he knows, has been so from his birth. The catheter introduced into the bladder through the urethra was easily made to appear at the umbilical opening. Thinking that the stone might be extracted through this aperture, Mr. Paget distended the bladder to the utmost with warm water, the umbilical aperture being tightly plugged, the patient reclining with his head lower than the pelvis, with the intention of removing the plug, in the hope that the calculus might be flushed out with the water; but it then occurred to him to try first the finger at the umbilicus. It readily passed, and when at full length down the unnatural passage, caught within the circle of the calculus sufficiently to enable him to drag it to the side of the bladder and extract it. The nucleus was found to be a hair, and, on carefully truncating it, the projecting extremity was seen. The phenomena connected with the opening were thus described:—There is a circular deficiency in the linea alba an inch in diameter, its margin being thickened, and of cartilaginous hardness. Through this protrudes a hernia of the size of a goose-egg, which, in lieu of ordinary integument is covered by mucous membrane, the surface, however, becoming dry when exposed for any length of time. He never makes water whilst the hernia is out, for when called to an effort for that purpose, the first act of the bladder is gradually to draw into the abdomen the whole of the protruded substance; its first contractions have no other effect, and it seems not to have the power to force the urine through the urethra until that has been accomplished. At the latter part of this act, at the instant of the disappearance of the hernia, there occurs a rather forcible jet of urine from the opening; the flow from the urethra also commences at this juncture, and the bladder is emptied in the usual way, the jet from the umbilicus ceasing, and not being renewed, except by a violent accelerating action of the expulsor muscles. He can retain a pint of urine. By watching the first contractions of the bladder it becomes evident, that to the thickened margin of the umbilical aperture are attached the muscular fibres of the bladder extended along the urachus. The pouch of the hernia is formed by eversion of the posterior part of the neck only, which is of course attached to the upper half of the aperture, and when protruded presses upon the hard edge of the lower half sufficiently to prevent the escape of urine, except under straining efforts of the abdominal muscles. He wears a girdle, with a thick pad of flannel to catch the urine. With the extraction of the calculus all the bladder symptoms ceased, and it was thought unadvisable to interfere with the congenital defect.

Mr. Charles Hawkins thought the case brought before them by Dr. Bence Jones was almost unique. It was evidently a case of retention of urine in the kidneys, or rather in the pelves of the kidneys, which he must suppose was caused by spasm, as the calculus was much too small to have impeded the flow of urine.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, July 19, 1850.

Derbyshire, William, Stockport, Cheshire.
Dixie, Woolstan Fleetwood, Bognor, Sussex.
Johnston, Alexander, Birmingham.
Lane, George Frederick, Finsbury-place, South.
Morris, Samuel, Colchester.
Roden, Serjeant Samuel, Dublin.
Ronalds, Francis Clarke, Isleworth, Middlesex.
Stevens, Nicholas Henry, London.
Stevenson, Henry Richmond, Whickham, near Newcastle-upon-Tyne.
Wills, John Smith, Axminster, Devon.

At the same meeting of the Court, Mr. Robert Wallace passed his examination for Naval Surgeon. This gentleman had previously been admitted a Member of the Edinburgh College.

Tuesday, July 23.

Adley, William Henry, Hon. East India Company's Service, Bengal.
Bridgman, George William, Ham Common, Surrey.
Buckle, Robert Thomas, Bedale, Yorkshire.
Dingley, William, Sherborne, Dorsetshire.
Evershed, Thomas Evans, Billinghurst, Sussex.
Gaye, Henry Searle, Minehead, Somersetshire.
Keyworth, John White, Aston, Berkshire.
Luxton, William Tidboald, Winckley, Devonshire.
Perkin, Richard Clark, Sydenham, Kent.
Salter, George, Malmesbury, Wiltshire.
Steele, William Stott, East Harlsey, Yorkshire.
Stormont, Henry Joseph, Wallingsford, Berkshire.
Williams, John Thomas, Hon. East India Company's Service.

Collegiate Prizes.—The Council of the Royal College of Surgeons have just announced the subject of the Jacksonian Prize for the ensuing year to be "The Causes, Diagnosis, and Treatment of Obstructions of the Intestines." The prize is of the value of twenty guineas, accompanied by an honorary certificate. The competition is confined to members of the College. The Collegiate triennial prize of fifty guineas, the subject of which is "The Functions of the Several Parts of the Large Intestines in Animals of the Class Mammalia," has not yet been adjudged.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on

Thursday, July 18, 1850.

Gilbertson, Joseph Bray, Preston, Lancashire.
Tuxford, James Edward, Boston, Lincolnshire.

The Testimonial from the National Association of General Practitioners to James Bird, Esq., and Henry Ancell, Esq.—On Wednesday, the 17th instant, a public dinner was given to these gentlemen, at the Thatched-house Tavern, St. James's-street, London, by the members of this Association, for the purpose of presenting to each of them a testimonial, as a record of their services in the cause of medical reform, and of the esteem and regard in which they were held. The dinner was attended by a large number of the most influential London and provincial general practitioners. Nathaniel Clifton, Esq., in the chair, with John Propert, Esq., as vice-chairman; and amongst the general company may be enumerated—H. P. Fuller, Esq., John Nussey, Esq., Thomas Martin, Esq., (of Reigate,) G. J. Squibb, Esq., James Stedman, Esq., (of Guildford,) R. Wallace, Esq., W. P. Vickers, Esq., George Webster, Esq., P. Hood, Esq., Dr. Bennett, (of Alton,) J. Ince, Esq., J. W. Turner, Esq., (of Kensington,) R. Dunn, Esq., Edward Tegart, Esq., E. Headland, Esq., &c. &c. The testimonials consist of two very splendid candelabra on massive plateaux, designed and manufactured by Mr. Henderson, of the Strand. The stem represents the trunk of a tree, encircled by rich foliage in the form of tendrils, supporting four branches and a basket, mounted upon a broad quadrangle pedestal, on which is the following inscription:—"Presented to ———, Member of the Royal College of Surgeons of England, by the members of the National Association of General Practitioners, as a token of their esteem and regard, a testimony of their appreciation of the talent and zeal displayed by him in the cause of medical reform, a record of their grateful thanks for the indefatigable services rendered by him to the profession, as one of the honorary secretaries of the National Association, and for the urbanity and courtesy evinced by him upon all occasions. 1850." The presentation of the testimonials was made by the Chairman, in a long, appropriate, and highly-complimentary address, which was received with the greatest enthusiasm by all present. Mr. Bird and Mr. Ancell respectively accepted the testimonial, and the honour done them, in appropriate speeches, in which the most gratifying allusions were made to the numerous friendships that had been formed, and the strong bond of union created during the lengthened proceedings of the National Association, establishing the best guarantee for the ultimate attainment of the objects sought, and the final triumph of the principles of medical reform advocated by the Association.

Military Appointments.—15th Foot.—Staff-Surgeon of the Second Class, Thomas Rose Dyce, to be Surgeon, vice Dobson, promoted on the Staff. Hospital Staff.—Deputy Inspector-General of Hospitals, Charles St. John, M.D., to be Inspector-General of Hospitals, vice Henry Franklin, who retires upon half-pay; Deputy Inspector-General with local rank, Andrew Fergusson, M.D., to be Deputy Inspector-General of Hospitals, vice St. John; Surgeon W. Dobson, from the 15th Foot, to be Staff-Surgeon of the First Class, vice Fergusson; Surgeon Alexander Gibb, M.D., from the 45th Foot, to be Staff-Surgeon of the Second Class, vice Dyce, appointed to the 15th Foot.

Naval Appointments.—Surgeons John Moolenburg Minter (1845,) to the Fox; W. H. Foster (1842), to the Salamander; Assistant-Surgeons George H. Sidley (1845), and George M. Gordon (1850), to the Fox; Augustus R. R. Preston (1846), to the Salamander; Assistant-Surgeon Mr. S. Bourchie (1850), additional, to be acting surgeon to the Wellington, 72, depôt ship of ordinary, Sheerness.

Mr. M'Whinnie has been elected Assistant-Surgeon to the Hospital for Diseases of the Skin.

Obituary.—On the 17th of April, at Calabar, Western Africa, W. Newbegin, Esq., aged 32, missionary and surgeon. At Exeter, on the 1st inst., Peter Wyatt, Esq., surgeon, of Islington. On the 12th inst., at Enfield, William Scott, Esq., aged 54, formerly surgeon of the Hon. East India Company's ship Repulse. On the 16th instant, at Hackney, John Mordaunt, Esq., surgeon. Lately, Peter Dent, Esq., surgeon, of Kenninghall. On the 11th itst., at St. Andrews, Patrick Mudie, M.D.

The Queen of Spain's Medical Attendant.—It is stated that Narvaez had insisted upon the dismissal of Sanchez, the medical attendant who delivered the Queen. Her Majesty expressed, in the most decided manner, the confidence which she reposed in the skill and fidelity of her physician, to whom she attributes the preservation of her life, and flatly refused to comply with the demand of the President of the Council. The King supported the Queen in this resolution. Narvaez, it is thought, will tender his resignation.

Medical Referees.—We have received a "Memorandum," signed by thirty-one medical practitioners resident in the town and neighbourhood of Bradford, in the county of York, whereby they pledge themselves not to reply to any inquiries, or grant any certificate regarding the health of candidates for Life Assurance, unless the Assurance Company or their Agent accompany the application with a fee.

Death of the Rev. W. Kirby, M.A., F.R.S.—This learned and scientific clergyman expired on the 4th inst., at the advanced age of 91. He was well known as the joint author, with Mr. Spence, of an excellent work on "Entomology." To the study of that science he devoted a large portion of his lengthened life. He also held the office of President of the Ipswich Museum.

Norfolk and Norwich Hospital.—The quarterly Report of this Institution showed that donations and legacies amounting to 87*l.* had been received. A dispenser, to assist the house-surgeon, had been appointed at 1*l.* per week, owing to the increase of duties occasioned by there being a larger number of patients, and fewer pupils. Erysipelas had affected the wards, and proved very fatal. Prophylactic measures were adopted by the Board, on the recom-

mendation of the medical staff. The report did not state the results. The measures adopted involved an outlay of 178*l*. The attack was attributed, in a great measure, to defective action of the water-closets, and of the drainage, to remedy which a further outlay of 85*l*. was required. The resignation of Dr. Evans, the senior physician, who had held that office for nearly thirty years, was announced, and the Board recommended that he be appointed honorary consulting physician, which was accordingly done. It was stated at the meeting, that there were not many pupils at the hospital, on account of the state of the profession, which was particularly unsettled. Gentlemen were in doubt whether to bring up their sons to the medical profession, which was now very full, and were seeking employment for them in other ways. In other places there were large schools of anatomy which attracted pupils; in this respect Norwich was deficient. A resolution, highly complimentary to the retiring physician, Dr. Evans, was carried unanimously, as also a vote of condolence to the widow and family of the late Dr. Crosse, on the heavy affliction they had suffered. The election of Mr. Nichols was then proceeded with, his proposer acknowledging it an unprecedented step to elect a gentleman who had not served the office of assistant-surgeon. He also alluded to the retirement of Mr. Firth from the contest, and said, that the opposition to Mr. Firth's election as surgeon was not intended to cast the slightest slur on his character. Notice was given of a proposition to modify one of the rules, so that there should be four surgeons instead of three, and that the office of assistant-surgeon be abolished. This proposal is evidently intended to compensate Mr. Firth for the act of injustice and injury under which he has suffered. Candidates for the vacant office of physician must be graduates of a British University, or hold the license of the College of Physicians. Dr. Ranking, Dr. Copeman, and Dr. Wharton, physician to the Dispensary, are in the field. There is also a vacancy in the office of surgeon-accoucheur to the Norwich Lying-in Charity.

The Cholera is declining at Malta. Up to the 10th inst. there had been 173 cases and 126 deaths. It is also abating in Mexico. Malignant typhus fever is said to be raging at Canton. It has not yet shown itself in the factories.

Death of President Taylor. — The cholera has struck a high and heavy blow among our transatlantic brethren. The President, General Taylor, "Old Rough and Ready," as he was termed, has fallen its victim in the midst of his official honours and duties. The duration of his illness is not stated, nor is there any account of the causes that led to the attack, the particulars of which were received only by the electric telegraph. He was in his 60th year.

Royal Infirmary, Glasgow.— M. Franconi has presented 30*l*. to this infirmary, being the receipts of one night's performance of his troop.

Water-cresses.—M. Chatin is said to have discovered the presence of iodine in water-cresses, and some other aquatic plants.

Suffolk Lunatic Asylum.—The visiting justices report that there are 265 patients in the asylum, of whom 258 are paupers. There are altogether 123 males, and 142 females. The total expenditure (for the year?) was 1060*l*. 8s. 1d. The Commissioners in Lunacy speak very highly of the establishment.

Starving Parish Medical Officers.—A short time back, a paragraph appeared in the columns of this journal relative to a vote of the Marylebone vestry, by which they apportioned certain rations to their medical officers, thereby treating them as paupers. We advised the staff to resign in a body, to mark their feeling of this disgraceful treatment, we being certain the profession did not number among its members any Ichabods willing to take their place under such circumstances. This step they did not think proper to take; and what is the consequence? They are almost starved, and obliged to buy provisions out of their scanty salaries. At the last meeting of the vestry, the chairman, Mr. Low, stated, that he was at the infirmary side a day or two ago, and saw two of the medical men at dinner, and he could affirm that the *piece of meat before them was not enough for any man.* It was the second day's meat, and he felt it would be a shame and disgrace to see the most menial officers so treated. (Hear, hear.) The subject dropped, and the wealthy parish of Marylebone is content to supply two gentlemen, working hard in its service, with a dinner avowedly not enough for one man.

The Advertising Corn-cutter.—Flatou *v.* Frezzolini.—This was a proceeding in the Brompton County Court by the plaintiff, an advertising corn-cutter, against the defendant, a singer at Her Majesty's Theatre, for 12*l*. for cutting corns. The plaintiff stated, that he had visited the defendant seven times at her residence to extract her corns, and had been detained on each occasion two or three hours. She had corns on nearly every toe, and two on each of the little toes. Mr. Durlacher said, that he was Her Majesty's chiropodist, and had attended all the Royal family. The charge made by Mr. Flatou was exorbitant. The custom of the profession was, to receive a guinea for each attendance, whatever the service might be. The Court awarded seven guineas with costs, to be paid immediately. The amount paid into Court by the defendant (2*l*. we believe) would have been ample remuneration, and more than the corn-cutter ought to have been paid.

Fever Hospitals in Ireland.—A Parliamentary paper just published gives the number of temporary fever hospitals kept up in each union in Ireland, and the expenditure for each in 1849; also, the number of fever hospitals supported by poor-rates, and the number of dispensaries, fever hospitals, and infirmaries, for which county presentments were made in the same year. Under the first head there are 43 unions, to which 60 temporary fever hospitals are attached; the annual expenditure for these being, 36,984*l*. 12s. 9d¾. 58 of these institutions have one medical officer each, the two others have two each. The smallest hospital, that for Lisnaskea, has15 beds; the largest, that for Cork, has 330. The pay of the medical officers varies greatly; many receive 5s. a day, (90*l*. 5s. a year,) whilst the lowest of the annual salaries is 20*l*., the highest 100*l*. Taking them all at yearly salaries, the total amount paid to the medical officers was 4,761*l*. 5s. The total number of patients admitted, 66,086; discharged, 52,840; died, 9369. The average cost of a patient, per week, varied in the different unions from 1s. 7d. to 8s. 2d., Carrick-on-Suir being the most expensive, and Skreeny, Manor Hamilton, the most economical. 139 unions have fever hospitals supported by the poor-rate: of these there are 114 under the temporary fever hospital Act, and 120 not under that Act. The discrepancy between the number of the hospitals and of the unions is explained by the fact that several of the latter have more than one hospital; Middleton to wit has 6 temporary, and 7 non-temporary; Ballinasloe has 4 temporary, and 1 not; Carlow has 5 temporary; Cork has 1 temporary, and 5 not; Fermoy has 7 temporary; Kilkenny 5 temporary, 1 not; Kilmallock 3 temporary, 2 not; and Limerick 4 temporary, 1 not. The total expense of the temporary hospitals for the year was 50,544*l*. 18s. 8d.; of the non-temporary, 31,724*l*. 19s. 7d. In addition to these, in all Ireland, there are 660 dispensaries; the private subscriptions for their support amounting to 25,954*l*. 3s. 10½d.; and the county presentment to 37,292*l*. 18s. 8d.: giving a total of 63,247*l*. 2s. 6½d. There are 63 fever hospitals, with a private subscription of 1979*l*. 18s. 2½d.; and a county presentment amounting to 10,921*l*. 16s. 9d: the total being 12,901*l*. 4s. 11½d. There are also 41 infirmaries; the private subscriptions being 1537*l*. 5s. 11½d.; the county presentment 29,797*l*. 3s. 0½d.: total, 31,334*l*. 9s. These afford a gross total of 764 charitable medical institutions, with a private income of 29,470*l*. 18s. 0½d.; and an income from county presentments amounting to 78,011*l*. 18s. 5½d.: the total income being 107,482*l*. 16s. 6d.

North Pancras Medical Provident Society.—We are requested to state that George Woolley, Esq., of 3, Moreton-Terrace, Kentish Town, has been appointed medical officer in ordinary to the above Institution, in the room of the late B. A. Robinson, Esq., deceased. The Institution, which was opened March 25, 1850, seems very flourishing, and much needed in the seat of its operations. The numbers who have availed themselves of the advantages offered during this short period are as follow:—Number of members to June 24, 1145; number of sick, 362; cured, 249; died, 5; remaining on the books, 108; midwifery cases, 14.

University of St. Andrews.—The Professorship of Civil History, at the above University, in the gift of the Marquis of Ailsa, having become vacant by the death of Dr. Ferrie, it was unanimously resolved that the chair should, for the future, be devoted to Natural History, and the presentation has fallen into the able hands of Dr. Macdonald, F.R.S.E., and lecturer upon Comparative Anatomy at the School of Medicine adjoining St. George's Hospital.

HEALTH OF LONDON DURING THE WEEK.

The mortality of London exhibits a small increase. The deaths registered in the two previous weeks were 794, 781; those in the week ending last Saturday were 863. To compare the corresponding weeks of 1840-8, the lowest number occurred in that of 1842, and was 744; the highest in that of 1848, when it was 1096; but in the year following the deaths of the corresponding week rose to 1741, when cholera had extended its ravages. The average of the ten weeks of 1840-9, is 974, and raised in the ratio of increase of population, 1063; compared with which latter standard, the return of last week shows a decrease of 200. In the last three weeks, the mortality from zymotic or epidemic diseases has manifested a slight tendency to increase; the deaths in this class have been successively 159, 168, and 176. But five of the diseases which are most important in the category of epidemics, remain nearly at their former amount, or have perceptibly declined; for last week only 3 children died of small-pox, 15 persons of scarlatina, 16 of measles, 22 of hooping-cough, and 31 of typhus, all of these complaints being less fatal than usual, especially the first two. The increase, however, is apparent in the diarrhœa among children, which is peculiar to this period of the year. Its progress, not very formidable, is shown in the numbers of the two previous weeks, which were 40, 37, and that of the last week, which was 51. In the twenty-ninth or corresponding week of 1846, there were 124 from the same cause; in 1848, there were 94; and last year 131. Of the 51 of last week, 35 occurred under one year of age; 8 at one and under 10; and the rest at more advanced ages. Five deaths were ascribed last week to cholera; 20 were registered in the same week of 1846, 21 in that of 1848, and 678 in that of 1849.

MORTALITY TABLE.

Deaths in the week ending Saturday, July 20, 1850.
(Metropolis.)

Causes of Death.	July 20. 0	15	60	All Ages	Sum of Ten Weeks.
All Causes	406	255	197	863	9738
Specified Causes	406	255	197	858	9694
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	136	22	18	176	2865
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	7	27	25	59	441
Tubercular Diseases	65	92	5	162	1995
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	49	27	41	117	1087
Diseases of the Heart and Blood-vessels	3	19	9	31	274
Diseases of the Lungs, and of the other Organs of Respiration	42	19	28	89	808
Diseases of the Stomach, Liver, and other Organs of Digestion	35	19	18	72	723
Diseases of the Kidneys, &c.	1	3	6	10	88
Childbirth, Diseases of the Uterus, &c.	...	8	1	9	109
Rheumatism, Diseases of the Bones, Joints, &c.	2	5	3	10	63
Diseases of the Skin, Cellular Tissue, &c.	...	1	2	3	6
Malformations	4	...	...	4	26
Premature Birth and Debility	23	2	...	25	234
Atrophy	22	1	1	24	198
Age	...	...	37	37	442
Sudden	2	3	1	6	92
Violence, Privation, Cold, and Intemperance	15	7	2	24	243
Causes not Specified	...	...	...	5	44

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	July 20, 1850.	Sum of Ten Weeks.
London...	1948369	863	9738
West	301189	138	1385
North	376568	168	1768
Central...	374199	140	1845
East	393067	179	1999
South	503346	238	2741

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	11	Heart	28	Phthisis.....	107
Bronchitis	35	Hooping-cough ...	22	Pneumonia	45
Cholera	5	Hydrocephalus ...	36	Scarlatina	15
Childbirth	2	Influenza	1	Small-pox	3
Convulsions	34	Liver	8	Stomach	5
Diarrhœa	51	Lungs.....	4	Teething	15
Dropsy	20	Measles	16	Typhus	31
Erysipelas	6	Paralysis	27	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	592	424	168
Females	601	439	162
Total.....	1193	863	330

METEOROLOGY OF THE WEEK.

	Day.								
	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...	
Electricity.*	Positive, and tension moderate at each examination.	Nothing was shown throughout the day.	Positive, and tension strong during the afternoon and evening.	Positive, and tension strong throughout the day.	Positive, and tension weak at 3 p.m.	Nothing was shown throughout the day.	Positive, and tension moderate at 3 p.m.	—	
Rain in Inches.	0·00	0·00	0·03	0·00	0·26	0·37	0·12	SUM	0·78
Amount of Horizontal Movement of the Air.	Miles. 80	60	55	20	25	50	40	SUM	330
General Direction of Wind.	P.M. N.E.	N.N.E.	Calm.	N. & Calm.	Calm.	Calm.	Calm.		
	A.M. N.	N.E.	E.N.E.	Calm.	Calm.	S.W.	N.		N.E. very light.
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 1.0	+ 8·6	+ 12·1	+ 8·4	+ 1·2	+ 0·6	— 0·2	+	4·5
Ditto. Dew Point.	58·4	61·8	63·1	61·7	59·9	59·8	58·3	60·9	
Mean of Thermometer. Dry.	62·8	70·4	73·6	69·4	61·9	61·1	60·1	65·6	
Mean of Barometer.	29·902	29·846	29·782	29·731	29·811	29·806	29 819	29·814	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

The receipt of books, pamphlets and newspapers, letters, and other communications, are acknowledged from Sir Benjamin Brodie, Bart., &c. &c., "Pathological Observations on the Diseases of the Joints." Fifth Edition Pp. 379. London. 1850. (We shall take an early opportunity of reviewing this valuable work.)—Mr. Bransby Cooper, F.R.S., Surgeon to Guy's Hospital. (The cases and engravings communicated by Mr. Bransby Cooper will be published next week.)—Dr. Spencer Thomson, of Haunton; Mr. George Aberdeen, of 1, Winchester-buildings; Dr. Hastings, of Stokenchurch; Mr. Ebsworth, of Bulwell; Dr. Tunstall, of Bath, "The Bath Waters; their Uses and Effects in the Cure and Relief of Chronic Diseases." Pp. 144. London. 1850.—Indus; Mr. Dover, of New-street Spring-gardens, "Petition to the House of Commons, stating he possessed 'the knowledge of a chemical agent, which will fix and precipitate all the matters in the London sewage emitting noxious smells and poisonous gasses;' and complaining that neither the Board of Health nor the Home Secretary will examine his project."—Mr. Tennant, Pentonville; Dr. Inglis, of Halifax; Hon. Secretaries of the Metropolitan Sanitary Association, "First Report on the Chief Evils affecting the Sanitary Condition of the Metropolis."—Mr. Ure, of Bloomsbury-square; Dr. Roe, of Plymouth; B.; Mr. George Harley, of the Royal Maternity Hospital, Edinburgh; Dr. Wilks, of Camberwell; Mr. Charles Hogg, M.R.C.S., "The Management of Infancy." Pp. 132. London. 1850.—A Subscriber of Several Years' Standing in Suffolk; Mr. Probert, of New Cavendish-street; Mr. Toynbee, F.R.S., Senior Surgeon to the St. George's and St. James's Dispensary; Dr. Parker, of the London Hospital; A Constant Reader; Note on the Duration of Pregnancy; Mr. Lafargue, of Foles Hill, near Coventry; Mr. J. H. Tucker, Secretary to the Epidemiological Society; M.R.C.S.E., of Manchester; A Young Dentist; Mr. Robertson, Hon. Sec. Charing-cross Hospital; A Very Old Subscriber; T. W., Medical Student; Messrs. Knight and Sons, of Foster-lane, "The Commercial Handbook of Chemical Analysis." By A. Normandy. Pp. 640. Lond. 1850; Mr. William Stevenson; Mr. M.; &c.

ORIGINAL LECTURES.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

1. ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE III.

The Tuberculous Predisposition continued.—Of the Peculiarities of Structure in Individual Parts and Organs and Particular Regions.—Functional Characteristics.—Of the Digestive Functions.—Of the Functions of Respiration, Circulation, and of the Animal Heat.—Of the Secretions and Excretions.—The Mucous.—The Cutaneous.—The Adipose Secretions.—The Urine.—The Cerumen, &c.—Of the Animal Functions and Functions of Relation.—The Muscular Powers.—The Senses and Moral and Intellectual Faculties.—The Generative Functions.—Sleep.—Summary remarks on the state of the Constitution in the Tuberculous Predisposition.

In the summary of the structural peculiarities of the tuberculous constitution already given it cannot escape the attention of the pathologist, that, regarding the animal body as constructed mainly of three kinds of tissue or organic material—cellular tissue, muscular fibre, and medullary matter—the peculiarities in question affect most especially the two former. In truth, there are not wanting grounds for considering the malnutrition as essentially an affection of the fundamental areolar or cellular tissue, proceeding from the vitiated blood either of the parent or the individual. But the muscular fibre is frequently involved, whether it be correlatively or secondarily to the cellular tissue. No evidence exists of structural change in the medullary matter, and we shall find reason to conclude, from the perfection of the animal functions of sensation and irritability, and from the state of the intellectual faculties, that in many cases, at least, the medullary matter remains intact; although in others, the derangements of the mental and nervous functions are such as to lead to the inference that structural modifications of the brain and nerves may sometimes occur, and, like the malnutrition of the other tissues, may be congenital.

OF THE PECULIARITIES OF STRUCTURE IN INDIVIDUAL PARTS AND ORGANS AND PARTICULAR REGIONS OF THE BODY IN THE TUBERCULOUS PREDISPOSITION.

The morbid state of the blood and blastema, and the malnutrition of cells and fibres are not only exhibited in the various tissues, but some remarkable peculiarities are observed in the form and development and the general characteristics of individual parts made up of different tissues. Generally there is a defect of symmetry, with a tendency, according to Hufeland and others, to the disunion of various parts of the body at the median line. The median line is also frequently removed from the centre, the lateral halves of the body being unequal; a conformation, it is remarked by Lugol, of the worst augury, as respects future disease. Many of the features of the face present highly characteristic appearances. In some of the most unequivocal cases the structure of the eyes exhibits several peculiarities. A bluish tint of the selerotic coat, even in adult age, resembling that presented in the earliest infancy, is very common; countenancing the idea, already several times adverted to, of an arrest of development. This coat is sometimes pearl-white, which, according to Hufeland, betrays a tendency to the mesenteric variety of the disease; it is also frequently traversed by streaks of enlarged and injected blood-vessels. The eyes, at other times, particularly in young children, are haggard and inexpressive, and the Meibomian glands are liable to be spuriously hypertrophied. The eyelids are sometimes thick or œdematous. The mouth is unsymmetrical,—small, or large, or too much arched; the upper or lower lip, or both lips, are liable to become tumid from a spurious hypertrophy, consisting of an infiltration of the mucous, cutaneous, and cellular tissues of which they are composed; and, as stated of the cellular tissue itself, and from a similar cause, this tumidity is subject to a rapid increase or decrease from slight variations of the general health, and is frequently more perceptible in the morning than during the remainder of the day. In the upper lip, the swelling frequently extends to the columnæ nasi and lower part of the nostrils, and there is occasionally a chap in the middle of the lip. The nose is sometimes swollen, red, and shining, and the alæ nasi spread in a remarkable manner. The lobes of the ears are also sometimes affected with a tumidity similar in its nature to that of the lips. These peculiarities, with the modified conditions of the dermoid, cellular, and muscular structures incidental to the tuberculous predisposition, according to their degree and varieties, and the mode in which they are combined, give the countenance several well-marked aspects. There is the pale, pasty, full cheek, with large upper lip and wide-spread alæ nasi of early childhood; the unnaturally fair or white complexion, resembling blanched wax, with large and conspicuous veins, combined with the roseate hue already described; the full, dark eye, with dilated pupil, long eyelashes, regular features, placid expression, but extremely delicate skin; or similar features, with equally fine skin, and a fair, florid complexion. There are combinations, sometimes of great beauty, sometimes the contrary, among the associations, which, with other peculiarities belonging to the tuberculous habit, strike the experienced medical observer, and frequently lead him at once to the inference, that the structures have been developed from a defective blastema, and that probably they continue to be nourished from vitiated blood endowed with a low degree of vitality. The peculiarities of tint in different parts of the body, as in the skin, hair, and capillaries, depend in part upon the tenuity and transparency of the tubes and vessels themselves, which traverse their structures, allowing the fluids, whether circulating or stagnant, to reflect the rays of light through them, and in part upon a change of tint of the parenchyma, the whole of the phenomena being ultimately referrible to the blood; which is not only, as we have seen, deficient in red corpuscles, but in which the yellow and blue colouring principles(a) of the liquor sanguinis have probably undergone some unknown changes, either in quantity or quality, involving modifications of tint in the blastema of the different organic tissues.

In the tuberculous predisposition the lymphatic glands over the whole body, but most especially in the neck, are believed to be larger than usual, although no accurate observations have been made on this point. They are, unquestionably, very prone to become enlarged, and in that state are regarded as one of the most certain diagnostic signs of that important variety of tuberculosis which comes under the designation of scrofula. The same remark applies to the tonsils, which, without any apparent deviation from the usual state of health, are liable to become spuriously hypertrophied, sometimes to the extent of affecting the voice and respiration. Baumes refers the habitual enlargement of the glands to an increased quantity of the blastema or nutritive fluid of the cellular tissue of these organs, which fluid he believes to be of an acescent quality. We have given the grounds upon which the acid theory, of tuberculous affections generally, rested, and there are no direct experiments to prove this acidity in the glands. The abdomen, particularly in tuberculous infants and children, is frequently very much enlarged; a circumstance readily explained by the weak organisation of the intestinal tunics and of the abdominal parietes, giving rise to habitual over-distension from flatulence and other dyspeptic effects produced by slight causes, and in some cases this distension is increased by enlargement of the mesenteric glands, which are liable to changes analogous to those of the external glands.

As respects the viscera, great doubt hangs over the real condition of their organisation in the tuberculous predisposition. Pathologists have made numerous observations of the morbid appearances exhibited after death from the different varieties of tuberculosis; but in almost all these cases some local disease has for a long time existed, and contributed to destroy the patient. These pathological appearances will

(a) Chevreul, Lassaigne, Lecanu, Sanson, Denis, quoted in "Lectures on the Blood," *Lancet*, 1839-40, Vol. I., p. 313.

have to be considered under the head of tuberculosis in a state of actual disease; but it is difficult, if not impossible, to draw any inference from them as to the state of the same organs, where only the predisposition to disease exists. No doubt they participate in the general malnutrition of the elementary tissues of which they are composed, and the defective cell-growth constituting this malnutrition, with the deteriorated qualities of the blood which pervades the organs, occasion the functional derangement about to be described. Most likely this constitutes the whole of their pathology in the tuberculous predisposition;—an inference supported by the fact, that where tuberculous subjects have died of diseases other than local tubercular disease, no constant pathological appearances are recorded.

Before terminating this account of the structural peculiarities of the tuberculous predisposition, the condition of the heart demands special consideration. It is very generally admitted that, in some tuberculous diseases at least, the heart is within its usual dimensions, and this would be consistent with the malnutrition of its cellular and fibrous structures corresponding with malnutrition of these tissues generally. According to Bigot, of Geneva, the linear dimensions of the heart are, *cæteris paribus*, in every way less in phthisis than under ordinary circumstances. Louis observed in 112 cases, in which death was caused by phthisis, that the heart, in the majority, was small, and very frequently not more than one half or two-thirds its ordinary size. Dr. Clark states, that he regards a small heart as a strong "predisposing cause" of consumption, and Mr. F. A. Bulley, and I believe other writers in our own country, have insisted upon this point. This, it is necessary, however, to state, has been disputed by others. Andral appears to have found the heart larger than natural in a majority of phthisical subjects, and the late Dr. Clendenning arrived at a somewhat similar conclusion; he found that the heart weighed considerably more in phthisical subjects than in health, but in chronic diseases generally there was an increase of weight in the viscera; and the increase of weight in the heart in phthisis, relative to the increase in weight of the other viscera, was very small indeed. New observations are required as to the size, density, and general nutritive condition of the heart in tuberculosis, distinguishing as accurately as possible its state of nutrition in the earlier and later stages of the affection, in the general disease, and after local affections of the viscera, particularly of the lungs, have for a long time existed, and previous and subsequent to the supervention of hectic fever. I have been in the habit, for many years past, of examining the heart in fatal cases of phthisis, and to the sight and touch it has almost invariably appeared to me to be of small dimensions or defective substance. The physical signs derived from percussion of the chest have also, in the main, favoured this view. In the minor degrees of the tuberculous predisposition, in which the cellular structures alone appear to have been imperfectly developed, leaving the fibrous structures comparatively intact, the heart may not only be as large as natural, in relation to the organisation of the individual, but even larger; still I consider that in the more decided cases the heart is small and its nutrition imperfect, and that this condition of the organ is in relation to the low vitality of cells, cytoblastema, and blood; and from the large amount of fibrous, as compared with cellular structure, the malnutrition of this organ may be very unequal in different cases.

FUNCTIONAL CHARACTERISTICS.

The low vitality and vitiation of the blood in the tuberculous predisposition, and the peculiarities of the general anatomical structures of the body already described, are necessarily accompanied by deviations from the perfect physiological standard of the corporeal functions. The structural characteristics are, however, more constant and more permanent than those belonging to the functions, inasmuch as the malnutrition of the tissues or organic changes which take place are not so readily repaired, if the blood be restored to its proper vitality. The functional disturbances, so far as they depend upon the morbid state of the blood, are immediately corrected when this fluid improves, and in proportion to the degree of its restoration to the standard of health. The structural imperfections are frequently permanent, lasting throughout life, as exemplified in the osseous system. Even functional imperfections, in so far as they depend upon defects of structure, may also be permanent; or they may admit of very gradual correction, in proportion to the improved nutrition of the structures in which they are seated.

A deficiency of vital power, corresponding with the low vitality of the blood, and the structural imperfections of the tissues and organs, is the most general expression by which the state of the functions of life in tuberculous subjects can be characterised; and this is measured by a greater or less degree of permanent constitutional debility. This debility is exhibited in the organic functions especially, and has already been exemplified by the weakness of cell-growth in the ultimate nutrition of the body.

OF THE DIGESTIVE FUNCTIONS IN THE TUBERCULOUS PREDISPOSITION.

Defects in the processes of primary digestion, short of actual disease, are among the most constant peculiarities of the tuberculous predisposition, and all the circumstances attending these defects prove that they are in relation to the peculiar qualities of tuberculous blood, and the malnutrition of the digestive organs. The tongue is, for the most part, covered with a whitish coating, and the whole alimentary canal is prone to increased mucous discharges, corresponding with the laxity of structure in the cellular, mucous, capillary, and muscular tissues, of which the parietes of the alimentary canal are constituted, and also with the low vitalised condition of the blood which pervades them. It might be presumed, that the secretions essential to the digestion of food are liable, in a corresponding degree, to a deterioration of quality; and this is, in fact, shown to be the case by the unnatural appearances which the evacuations frequently present. The appetite for food, in tuberculous subjects, is frequently very good, indicating that the sentient principle of the function is unimpaired. It is frequently even craving or voracious, and this appears to correspond with the demands made by the organic tissues upon the deteriorated blood. The blood loses more than it can afford of its nutrient elements; in its deteriorated state it becomes rapidly exhausted during the greater circulation; and the exhausted blood, in its passage through the sentient tissues of the stomach, produces an excessive and morbid excitement of the sensation of hunger. At the same time, the vitiated, diluted, or, in some respects, defective digestive secretions, poured into the alimentary canal from the same morbid blood, or the nervous tissues being involved in the general deterioration, sometimes diminishes or totally destroys the natural appetite; hence, as remarked by Lugol, many tuberculous children are never hungry, and do not digest a sixth part of the food which a healthy child of the same age would consume. In either case, according to the observations of Dr. Todd, the food neither satisfies nor appears to nourish, and there is an empty or sinking sensation at the stomach, only temporarily relieved by eating, the patient feeling, after a meal, as if he had long fasted, and being again desirous of taking food. From the same peculiarities of the organisation, both of the solids and fluids of the stomach, nausea and vomiting are easily excited, and the evacuated substances are acid, acrid, or in a less advanced stage of digestion than, from the time they have been received into the stomach, they ought to be, and are frequently mixed with an undue proportion of mucus or with vitiated bile; and the digestion of the food is attended with acid eructations and flatulence.

In the intestinal canal the fæces are liable to become very light, or drab coloured, or greenish, and there is at one time a deficiency, and at another time a redundancy of very pale yellow or of greenish bile, not only corresponding with the morbid state of the blood conveyed to the liver, but indicating irregularity, and very frequently torpor, in the action of this organ. The bowels are prone to be more slow in their action than natural, unless, from an accumulation of mucous secretion and the presence of undigested aliment, their coats become irritated. In this case the tongue becomes red at its point, or at its point and edges, and presents prominent enlarged papillæ through its mucous coating; flatulence occurs, accumulations take place in the intestines, and, from the weak organization of their tunics, the bowels become distended, increasing the habitual prominence of the abdomen already described; or diarrhœa may occur with partial and temporary relief. The evacuations are also liable to become very fetid, not only from chemical changes in the partially digested food, but from defective animalization of the whole fæcal mass, indicating the deficiency or deteriorated qualities of the digestive secretions.

These derangements of the digestive functions are frequently slight in degree and habitual, so that they cannot be regarded as constituting a diseased condition of the individual. In the minor degrees they form an important feature in that state of the constitution, short of actual disease, which I am now describing as the tuberculous predisposition.

OF THE FUNCTIONS OF RESPIRATION, CIRCULATION, AND OF THE ANIMAL HEAT IN THE TUBERCULOUS PREDISPOSITION.

1. *Of the Respiration.*—A contraction of the chest has been described as one of the results of the malnutrition which characterises this constitution, and this may be accepted as indicating a habitual feeble expansion of the lungs. What relation this may have to the diminution of the red corpuscles of the blood has not been investigated. This feeble expansion of the lungs no doubt frequently occurs from the earliest period of extra-uterine existence, and must be accompanied with a proportionate diminution of the volume of the lungs, resulting from the law of the animal economy, that the containing parts are adapted, with geometrical precision, to the volume of their contents. The anatomical construction of the chest, and the small proportion of red corpuscles, are also significant of a diminution of the function of respiration. The contraction of the chest may also be taken as an evidence of a general feebleness of the action of the right side of the heart. The whole clearly marking a debility of the pulmonary circulation, which, in many of the congenital cases, is radically, constitutionally, and frequently hereditarily, weak and small.

2. *Of the Circulation.*—Independently of any inference that might be drawn from the malnutrition and diminished size of the heart, this organ has, for the most part, a feeble contractile power in tuberculous subjects. The contractile power of the vessels being proportionate, *cæteris paribus*, to the physical strength of their coats, which partake of the general defects of cellular and fibrous nutrition, the action of the vessels generally is also weak and their functions are proportionately imperfect. Hence the usual pulse of individuals predisposed to tuberculosis is weak. The low vitality of the blood, the debility of the heart, and the tenuity and distensibility of the vessels, occasion a languid circulation in the capillaries, with a constant tendency to coldness and lividity in the extremities, and to partial congestions. This condition of the circulation is frequently the predisposing cause of congestive and inflammatory diseases, and so influences their symptoms and progress as to give them their scrofulous or tuberculous character. The state of the circulation explains many of the most prominent circumstances in the history of tuberculous diseases. The pulse of infants has occasionally been observed to be slower than natural, with longer intervals, the stroke of the artery against the finger being remarkably soft; but, generally, the weakness of the pulse is marked by celerity, and by the facility with which it is rendered more rapid by the action of stimulants.

3. *Of the Animal Heat.*—Individuals predisposed to tuberculosis have great difficulty in sustaining the usual degree of animal heat, and this constitutes an important and a very general peculiarity. This low power of producing heat is manifestly in relation to the low degree of the vitality of the blood, to the small proportion of the red corpuscles, to the feebleness of the respiratory functions, and to the languor of the circulation. Hence the frequent coldness and clamminess of the extremities and the remarkable sensibility to the impressions both of heat and cold which are complained of or may be observed in tuberculous subjects.

OF THE SECRETIONS AND EXCRETIONS IN THE TUBERCULOUS PREDISPOSITION.

It has already been shown that the secretions poured into the alimentary canal and subservient to the various stages of digestion are very frequently disordered. As respects the bile, the intestinal mucus, and probably the gastric juice, we have frequently very clear evidence of this derangement; and of those secretions respecting which we have not obtained any evidence, it is scarcely probable that they can be healthy when derived from blood in any decided degree tuberculous, and separated from that blood by ill-nourished structures. The secretions and excretions generally furnish unequivocal evidence of the morbid state of the blood in the predisposition.

1. *Of the Mucous Secretions.*—There is a general predominance of mucous secretions in this constitution. These secretions are met with where in a perfectly physiological state of the mucous membranes nothing more than a fine halitus would be thrown off, and they are produced by slighter causes and sustained for more lengthened periods than in perfect health. This tendency to mucous secretion is in relation to the vitiated condition of the liquor sanguinis, and probably of its albumen, the aqueous state of the blood, the depraved blastema, and loose organisation of the cells of the mucous membrane itself, already described. The tendency to mucous discharges from the alimentary canal has been mentioned. Such discharges are also frequent, and liable to be abundant, from the respiratory passages, the nose, the eyes, and ears, as also from the lining membranes of the urinary and genital organs, both male and female; and this tendency will be found to have a direct relation to the special pathology when tuberculosis as a disease is under consideration.

2. *Of the Cutaneous Secretions.*—Corresponding with the malnutrition of the cutaneous tissues, the morbid blastema which pervades them, and the vitiated blood circulating through them, the cutaneous functions are rarely in a physiological state. The skin is either harsh and dry, or it secretes from the diseased blood acid, fetid, or oily materials. The insensible transpiration is said to be very frequently defective, but the determination of this, as a subject of experimental inquiry, has never been undertaken. Considering the large proportion of the ingesta which passes off by transpiration in the physiological state,—say nine-sixteenths—the question, What is the state of the constitution in reference to this function in individuals predisposed to tuberculosis? is a very important one. This function should be examined in relation to the actual state of the blood, the respiration, and the nutrition of the cellular and adipose tissues, and of the body generally. Many tuberculous subjects are very little subject to general perspiration. Others have a great tendency to perspire on the least exertion or excitement. Almost all are especially prone to copious partial sweats; the palms of the hands, the soles of the feet, the arm-pits, the groins, and the fold behind the ears, being easily rendered damp, and the feet and hands clammy and cold; and these perspirations in the feet and arm-pits being attended with a very fetid odour.

3. *Of the Adipose Secretions.*—The fat of scrofulous subjects is described by some of the older writers as whiter, firmer, and more disposed to collect in masses than usual. (Baumes.) Tuberculous subjects are frequently very fat, particularly as children or while young; and this fat is said to be defective in composition, although we have no evidence of the fact; but experience confirms the observation, that it is very readily deposited and very readily absorbed. Recent discoveries also show that the oily principle of nutrition is in some way very intimately connected with the specialty of the tuberculous habit. The tendency of the animal oil, at the temperature of the human body, to re-act by its elements, and pass into ulterior chemical compounds, as shown by the frequent rancidity of the oily secretions from the sebaceous glands of the skin and scalp, appears to be in relation to the fetid tedency of the alimentary excretions and to the low vitality of the blood and the mucous and cutaneous structures; the chemical changes being inefficiently controlled.

The secretion of oil, and its existence in the blastema, are probably essential to the nutrition of cells; but the new views which have been lately propounded on this subject, will come under consideration when treating of the general pathology of tuberculosis as a disease.

4. *The Urine.*—In relation to the small quantity of colouring matter in the blood, the urinary secretion is for the most part paler than natural; its specific gravity is low, and it accordingly contains a smaller proportion of solid ingredients, corresponding in this respect with the diminished number of molecular actions in the blood, and the diminished amount of the change of matter, as between blood and tissue, over the whole body. Thus the urine furnishes a small proportion of urea. Its quantity is generally represented as moderate; but it frequently deposits a whitish sediment of phosphates and lithates, and, owing to the weak organisation of the mucous membranes, the tendency to mucous secretion, and the readiness with which cells are cast off, it is apt to present a larger proportion of mucus than usual, and to exhibit a mucous deposit.

5. *The Cerumen* is liable to analogous changes, being fre-

quently in excess, with a fetid tendency. An excessive secretion also frequently occurs from the *Meibomian glands*.

OF THE ANIMAL FUNCTIONS, AND FUNCTIONS OF RELATION, IN THE TUBERCULOUS PREDISPOSITION.

Of the Muscular Powers.—The debility of the *voluntary* muscular system is indicated by the diminished tone of the muscles corresponding with their malnutrition; by their inability to sustain exertion; by the rapidity with which power is exhausted, and by the length of time required for the renewal of power. As respects voluntary muscular power, measured by the force and velocity of motion and the time required for its renewal when exhausted, the inferiority of tuberculous subjects, as compared with those in health, is frequently very great. But, in some tuberculous subjects, although the muscular power is manifestly below the standard of health, the mobility, owing to the integrity of the nervous system, is remarkable, and they exhibit great aptitude for exertions which they can ill sustain. The low degree of *involuntary* muscular power is exhibited in the diminished power of the heart, the feebleness and distensibility of the muscular coats of the intestines and bladder, and especially by the action of the iris. The habitually dilated pupil, which contributes to give a peculiar lustre to the eye, and is a very important characteristic of tuberculosis, and perhaps especially of the consumptive habit, depends upon the diminished power of the iris. It has been remarked, that it is a better measure of the tone of the muscular system than the touch; since want of exercise alone would relax, for instance, the arm of a delicate female as compared with that of a labourer; but the iris is employed alike by the poor and the rich. Whatever the physiological explanation of the action of the iris, the habitual dilatation of the pupil, as it often occurs in tuberculous subjects, is an important sign of the general constitutional debility.

The debility in infants and young children is frequently marked by a kind of apathy to motion of all kinds; the child, from disinclination to motion, requires to be dragged along by the hand; the ligaments are relaxed and the joints weak; and, as he gets older, the head is allowed to fall forwards from a difficulty of sustaining its weight, the muscles of the spinal column with those of the rest of the body partaking of the general malnutrition, and, as before described, becoming flabby and weak.

Of the Senses and Moral and Intellectual Faculties.—Even in infancy and early childhood, the general expression of the countenance frequently indicates some marked peculiarity in the sensorial and intellectual qualifications of those predisposed to tuberculosis. Sometimes the expression appears to be in advance of the age of the individual. Sometimes it indicates great torpor or hebetude, at others amiability with want of energy. Or the physiognomy may appear to indicate an advance of the mental faculties over the age and bodily functions during infancy, and the contrary in after years. Sometimes, also, the expression of the features, together with other signs of the predisposition, points to a tendency to tubercular meningitis. As age advances the sensorial and mental faculties of individuals constituted from tuberculous blood exhibit great varieties, and frequently stand out in broad relief upon the basis of their enfeebled organization. The senses are sometimes acute, and even morbidly so; the perception is keen, the memory tenacious, and the imagination predominant, and there is frequently a premature development of the mental faculties generally, with great acuteness of mind; the affections and passions are also sometimes remarkably ardent, and the temper quick and irritable; these qualities are most common in individuals with fair hair, florid complexion, and delicate skin, wherein the organisation of the nervous system seems to have maintained its integrity. In other instances the senses are obtuse, and the individuals listless, the intellectual and moral powers the very reverse of the former, late in their development, in reference to the age and circumstances of education of the individual, and characterised by hebetude throughout life; this, for the most part, occurs in those who have dark hair, swarthy skins, and swollen, pasty countenances, and whose habits are indolent. If cretinism be regarded as a tuberculous affection, it is exemplified in its extreme form in the cretins of the Alps; here, from very early life, and most frequently hereditarily, the nervous system must have been involved in the general deterioration of the organization.

Thus it would appear that the functions of animal life exhibit two extreme opposites. For the purpose of reconciling this apparent inconsistency as respects the sensorial and mental, as well as physical powers of tuberculous subjects, we must consider some circumstances connected with the development and nutrition of the nerves. Although the nerves are developed from cells their dependence upon the proper material of cell growth appears to cease at a very early period of embryotic existence, and the medullary portion of the nervous structures becomes a secondary deposit in the cell membrane. The materials constituting the proper substance of nerves, with all other materials employed in building up and sustaining the animal economy, are equally derived from the blood, and they differ *in toto* from the materials required for the nutrition and growth of cellular structures. The nervous tissue differs from other tissues in that it never can, like the other tissues, be formed at the expense of the cellular tissues. This being the case, it by no means follows that a special morbid condition of the blood, which furnishes a morbid blastema to the cellular, gelatinous, and fibrous tissues, should necessarily furnish morbid materials for the nutrition of the anatomical nervous system. In many of the most unequivocal cases of the tuberculous constitution the structure of the nerves is perfectly intact, although in other instances this structure may be involved, and the importance of this fact will be seen when we have to regard the symptoms and the varieties of the local diseases which supervene on the tuberculous constitution.

Of the Generative Functions.—Much difference of opinion appears to have existed as to the state of the generative functions in tuberculous subjects. According to Lugol, as respects either sex, they are frequently delayed. Young men, this author states, are often in this respect little more advanced at eighteen years of age, or later, than children of six or nine years old, and females are no less backward in their development, often presenting no signs of nubility at eighteen. The voice, in the male, at the period of puberty, frequently remains infantile. In females, menstruation is frequently established with dysmenorrhœa, perhaps for two or three years, or even the whole of life, the discharge being either inefficient, or only of one or two days' duration; or excessive, lasting six or seven days, and unaccompanied by the other signs of puberty. In a few cases the reverse appears to happen, and tuberculous subjects are remarkably erotic; but the signs of generative power are mostly deceptive,—a very little indulgence becomes excess, and induces exhaustion, which is not easily restored. Whatever the state of the generative power, either in the male or the female, the very common result of the exercise of that power is, that the fecundating principle derived from the tuberculous blood of the former transmits the tuberculous taint to the ovum, and that the ovum developed and nourished from the tubercular blood of the latter, itself becomes tuberculous; hence the disease becomes hereditary.

Sleep.—In the tuberculous predisposition, and in tuberculous subjects generally, in all its grades and varieties, *sleep*, both during comparative health and in disease, in children and in adults, fails to renovate the powers and functions of life. It frequently, even appears to occasion fatigue; the return of watchfulness being attended with a sensation of weariness,—a circumstance best accounted for by the state of the blood, the accumulation of vital power by the renovation of the blood during sleep, after the exhaustion of vital power during the exertions of the day, being rarely sufficient for the demands of the system and the muscular exertions of the individual.

Finally, the tuberculous disease of the blood, even in its slighter shades, may influence all the functions of life. This influence is exhibited, not only in development, growth, and nutrition, in the habit or constitution, in the exercise of the functions and faculties, but in the succession of the stages of life, the processes of dentition, and the phenomena of puberty. As remarked by Baumes, they all announce something heterogeneous which injures and perverts the order and habitual succession of the phenomena. That something we have described as the diseased condition of the blood. Many of these functional perversions, in their more aggravated form, become the symptoms of the most cruel disease with which mankind is afflicted, and, as such, they will have to be more fully considered as we proceed.

[To be continued.]

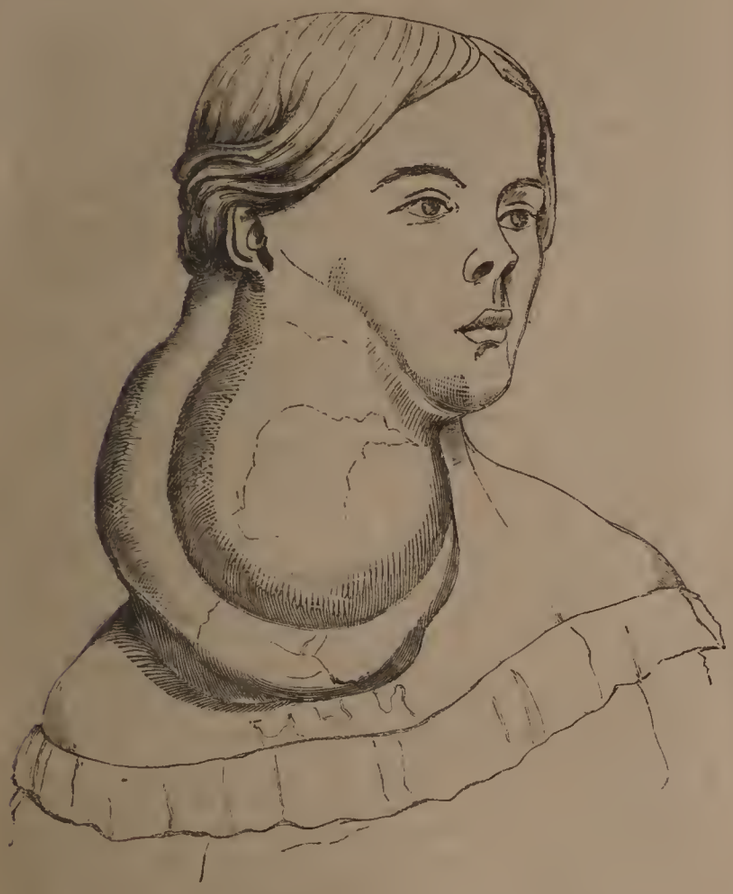
ORIGINAL COMMUNICATIONS.

REMOVAL OF A LARGE TUMOUR FROM THE NECK.

By HENRY COOPER READE, Esq.,
Surgeon H.M. 16th Regiment.

WITH LETTER FROM DR. HACKET, DEPUTY-INSPECTOR-GENERAL, TO SIR JAMES M'GREGOR, BART.

(Communicated by BRANSBY COOPER, Esq., F.R.S., Surgeon to Guy's Hospital.)



BEFORE THE OPERATION.

AFTER THE OPERATION.

"Corfu, June 5, 1850.

"Sir,—I have much pleasure in forwarding to you the accompanying surgical case, which reflects great credit on the lately appointed Surgeon Reade, of the 16th Regiment, as well as his immediate assistant in the operation, Mr. Smith of the 36th Regiment.

"The result was deemed exceedingly dubious by all—army, navy, and civil practitioners—who witnessed it. Its success was particularly gratifying to me, as two years ago I advocated its eligibility for operation, when it was to have taken place, but afterwards declined by the talented medical officer, not now in the command, who was to have undertaken it.

"I have the honour to be, Sir,
"Your most obedient, humble servant,
(Signed) "W. Hacket, M.D.,
Deputy-Inspector General.

"Sir J. M'Gregor, Bart., Director-General,
&c. &c. &c., London."

Sarah Hurst, aged 14, of strumous appearance. About six years since a small glandular swelling was perceived, about the size of a marble, a little anterior and inferior to the angle of the lower jaw on the right side, unaccompanied by pain. Medicinal means were successfully employed to remove it. In the following year it re-appeared, but differing in form and size, having a broader base and being less prominent. The tumour, independent of every attempt to disperse it, continued to increase until the beginning of 1847, when a second tumour appeared posterior to the first, which was at that time about the size of a duck's egg. These tumours have been rapidly increasing in size since that period, particularly during the last six months. The swelling occupies the right side of the neck, from the ear and mastoid process to the clavicle and sternum, about the size of an infant's head of two years old, presenting two prominences, anteriorly and posteriorly, separated by a sulcus formed by the sterno-cleido mastoid muscle; the surface is slightly discoloured. At the lower part is seen the external jugular vein, and at the lower border are some small oval glands. The swelling can be easily moved from side to side, having apparently no firm attachments. The integuments slide readily over it. The tumour is hard and very slightly elastic; no pain is felt either in the tumour or from its pressure. It measures, from the mastoid process to the sterno-clavicular articulation, ten inches; from the most posterior part to the chin, eleven inches.

A meeting of medical officers having been convened, the propriety of operating was decided on. She was accordingly admitted into the Garrison Hospital on the 13th of May, giving full sanction for its removal.

On the 17th May, the operation of extirpation was performed in presence of the medical officers of the garrison, of those of the navy in harbour, and the principal Greek surgeons of the place. A unanimous sanction as to its propriety having been generally accorded, though from the excessive difficulty of the operation, from the deep attachments of the diseased mass, some doubts as to its success were expressed. Two years previously, when of scarcely one-third the size, the same objections were sufficient to deter an experienced staff-surgeon from undertaking the operation.

The girl, who evinced the utmost composure, having been placed on the table, chloroform was administered by means of a sponge adapted to the nose and upper lip. The first incision commenced about half an inch posterior to the

mastoid process, and was carried over the superior portion of the tumour elliptically to its anterior and inferior portion; the second, commencing at the centre of the ellipsis thus formed, was carried down to the achromio-clavicular articulation; the flaps were dissected back, the inferior containing the superficial jugular vein. Considerable bleeding having occurred after the first incision, a desire was expressed by some present to discontinue the operation, fearing the tumour to be of a vascular nature. The anterior lobe was first dissected out from its attachments, which were deep behind the sternal extremity of the clavicle; the posterior lobe, which commenced at the division caused by the sterno-mastoid muscle, extended deeply behind the mastoid process, and lay closely adjacent to the parotid gland. The middle and internal lobe, last dissected out, was with the greatest difficulty removed, its lower surface having become very closely adherent to the sheath of the internal jugular vein and carotid artery. A branch of the vein running into the tumour was divided, and secured by ligature. The chloroform was applied about six times. No consciousness whatever was evinced during the operation, which lasted three quarters of an hour; her pulse fell very considerably, and, at one time, was not perceptible. After a lapse of half an hour, three sutures were applied.

The parts have been daily dressed with adhesive plaster; union is taking place most favourably; no bad symptom whatever has shown itself from the commencement; and she is now walking about the hospital, happy in her relief from a burden of six years' standing. The tumour weighed two pounds, which, when cut into, presented a hard glandular formation.

My sincere thanks are due to Dr. Hacket, for his support during the entire proceeding, without which I should not have felt myself justified in undertaking so formidable an operation. The very valuable assistance of Mr. Smith, assistant-surgeon 36th Regiment, I also wish to express my thanks for, and whose high professional talents I cannot sufficiently eulogise. I am also very much indebted to Dr. Savage, surgeon, Ordnance Medical Department, for the accompanying sketches, by whose masterly hand they have been admirably executed.

Corfu, July, 1850.

CASES RESULTING FROM THE LATE STEAM-ENGINE EXPLOSION AT BRISTOL.

By JOHN HARRISON, Esq., F.R.C.S.
Senior Surgeon to the Bristol Infirmary.

The following is a brief report of the surgical cases admitted as in-patients of the Bristol Infirmary, under the care of my colleague, Mr. Morgan, on the evening of July 22, 1850, and resulting from the explosion of the boiler of a small steam-boat which plied to and fro upon the floating harbour. The explosion took place between 8 and 9 p.m., July 22, previous to the starting of the steamer, while she was lying alongside the usual embarking place. It is supposed that fifty people were on board at the time. I have no account of the other persons injured. It is stated, that several bodies of persons scalded and drowned have been recovered, and active search was yesterday still making for the recovery of the bodies of others yet missing.

The following cases were received into the infirmary:—

1st. Charles Keating, aged 24. This patient only lived a few minutes after admission. He had a compound and comminuted fracture of the left leg, just above the ankle-joint. The wound communicating with the fracture was very small, and was produced apparently by a sharp splinter of bone from within protruding through the skin. Muscles very much disorganised about the fracture; also there was a comminuted fracture of the thigh on the same side. The muscles and soft parts beneath the skin were pulped and lacerated. Both bones of right leg fractured about middle third; bones much comminuted, with corresponding injury to soft parts beneath the skin; compound fracture of the left elbow-joint; the bones forming the joint were completely smashed, but the external wound was small. There were marks of contusion and abrasion about the face.

2. W. Nicholas, middle aged, admitted at the same time; lived only a few minutes after admission. His injuries were as follow:—Comminuted simple fracture of right leg, just above ankle-joint. No particular indication of external injury to the skin; but the bones excessively splintered and muscles disorganised. Both the feet were much bruised. There was a wound about two inches long on dorsum of right foot. Left thigh fractured in several places along the shaft, but the soft parts not so much pulped as in the right leg. A large diffused swelling extended over upper and anterior part of thorax, continuing over the neck. Pressure upon this swelling indicated the presence of air in the cellular tissue. Upper ribs on left side could not be traced, but seemed to be driven into the lungs. Extensively scalded over back and nates.

3. Albinus Puddy, aged 20, the captain of the boat. Upon admission he was found much collapsed; had been apparently under water, as his clothes were very wet. He was unable to answer questions rationally. Did not know that he had met with an accident. He had compound and comminuted fracture of the right leg, soft parts not very much involved; also comminuted fracture of left leg; both injuries just above ankle-joint. This patient also was severely scalded in left arm, axilla, shoulder, and side. Patient continued in a very alarming state all night. Pulse 160, and very feeble. He recovered considerably during the ensuing day, and at the date of this report continues to improve.

4. David Lewis, aged 19, fireman on board the boat. This man was blown at once into the water. Thinks he saved himself by swimming. Was standing close to boiler at the time of the explosion. He has severe scalds about right side of face and head, also on left arm. There is a wound under his chin, which communicates with mouth, saliva passing through it. There is a jagged wound through lower lip. One ankle contused. This patient has required the introduction of the catheter.

5. Francis Lucas, aged 30, clerk at a brass-founder's. When admitted was insensible, with much collapse. He had evidently been under water. His clothes were torn in several places, apparently by the efforts made to hook him out of the water. He had a lacerated wound on right temple, with hæmorrhage. His pupils were dilated, his breathing slow and laboured. After re-action, venesection was employed, with calomel and injections. He has recovered partial consciousness, and continues rather to improve at the date of report.

6. William Cooper, aged 46. Upon admission was collapsed and comatose. Had been in the water. He had very extensive scalds over the posterior part of the lower extremities, nates, and back. He never rallied, but gradually sinking, in spite of all efforts to sustain him, died 7 a.m., July 23. This patient, having vomited some blood before death, a *post-mortem* examination was made. There was nothing material elicited from the examination. The viscera were all healthy, excepting that the lungs were much congested. The lining membrane of trachea was rather redder than natural, and in the pharynx there was some bloody fluid, but no particular lesion was discovered. The stomach contained food unmixed with any blood. The patient died apparently from the combined shock of drowning and scalding.

7. Charlotte Hodge, aged 17, servant. Both feet and legs, as high as knees, severely scalded. Requires catheter. At date of report the patient was going on well.

8. Martha Hemmings, aged 20, servant. Had two children with her at the time of the explosion. One was drowned, aged nine or ten; and the other, much scalded, was admitted into the infirmary. Hemmings was rescued from drowning by boatmen. She has severe scalds of both legs and right arm, also much contusion of right side of face and head, but was going on favourably up to date of report.

9. Thomas Venn, aged 1 year 10 months,—the child before mentioned,—is extensively scalded over both legs, nates, and abdomen as high as umbilicus, and back. He has been at times much convulsed since admission. His scalp is also contused. Breathes very rapidly. Pulse rapid and weak. Continues in a very dangerous state.

10. Mary Dustin, aged 24, had compound dislocation of left ankle-joint. The fibula, which was not fractured, protruded about an inch and a half through wound in soft parts. Patient had been in the water, but was not scalded. After consultation, the protruding fibula was removed with saw, and foot reduced. Going on very well at date of report.

11. Eliza Fulford, aged 28, very dreadfully scalded over entire surface of extremities, trunk, and head; has con-

tinued to sink, and at date of report was gradually becoming more collapsed.

12. Her child, Eliza Fulford, aged 11; admitted at the same time, badly scalded over both legs as high as knees; she had also deep incised wound over left gluteus; right arm scalded, but not extensively, also contused about head and face. Patient, like the others, had been in the water, and, though for a while she was alarmingly collapsed, has now re-action, and appears going on as well as could be hoped for.

13. William Bailey, aged 34; strong healthy man; admitted with compound and comminuted fracture of tibia and fibula of left-leg at its lower third. There is extensive injury to soft parts around the fracture. Crepitation of air can be felt beneath the skin, between tibia and fibula, nearly as high as knee. This patient was scalded over the whole of left leg, thigh, and groin. There were also contusions and scalds about the face. A consultation was held upon the case, and amputation of left leg agreed upon below the knee. The operation was not performed until the next day, the patient refusing at first to submit. Chloroform having been administered, the limb was amputated about seventeen hours after the accident happened.

Upon minute examination of the injured parts after the operation, the fibula was found excessively comminuted; the tibia broken in several places extending into ankle-joint, and the soft parts beneath the skin appeared like bruised liver. Patient going on well up to present date.

14. William Brewer, aged 44, had been employed in a tobacco warehouse. When admitted was excessively collapsed. He had fracture of right leg with extensive laceration of skin and muscles; the fractured tibia protruding three or four inches at its lower third; fibula extensively comminuted nearly through its whole extent. He had also compound comminuted fracture of the left leg; the soft parts on this side, however, were not materially involved, the wound which communicated with the fracture being very small. The patient was severely scalded about the legs, also on arm and knee, but not so extensively. He was so alarmingly collapsed for several hours after his admission, that efforts were directed only to restore his failing powers. After some hours he rallied, and, in consultation, amputation of the right leg was determined on when he should have recovered sufficiently to bear the operation. After a few hours' further delay he appeared to have so far rallied as to permit the operation, which was accordingly performed. The patient, however, only lived about twenty-three hours after amputation.

15. Thomas White, aged 46, accountant. This patient is only very slightly scalded about the left ear. He had dislocation of the right ankle inwards, with fracture of fibula. The dislocation was reduced, and the limb, at the date of report, was going on well.

These are all the cases admitted on the evening of the 22nd. There were several out-patients, whose injuries were attended to, and who returned to their own homes.

The great number of fractured legs is remarkable in this list, and the force applied must have been excessive to have produced such great splintering of the bones. Probably a portion of the boiler, or some heavy rounded body, struck the legs of those sufferers who appear to have been more immediately about the engine, and (in the same manner as a cannon shot when somewhat spent) disorganised in many cases the internal structures of the limbs, without producing external wound of the skin.

This condition was very apparent in the cases of Charles Keating and William Nicholas.

The scalds were of a very severe description; in some instances they appear to have resulted from the application of boiling water, which flowed from the boiler, but in the majority from the blast of steam.

The patients, having been almost all of them chilled by immersion in the water, were unusually collapsed when admitted to the infirmary, and required careful attention to the administration of stimulants, and to the maintenance of their animal heat. The scalds were chiefly topically treated by the application of lint dipped in the linimentum calcis, the whole surface being afterwards enveloped in fine carded cotton wool. This plan of interposing the moistened lint between the wool and the injured parts prevents the evil of the subsequent adhesion of the cotton wool to the vesicated and discharging surfaces.

13, Berkeley-square, Bristol, July 24, 1850.

P.S.—July 28.—Since the date of my first report, I have added the following brief notes of the further progress and treatment of the most important of the above cases up to the present date.

There have been two additional deaths, viz., Thomas Venn, (case 9,) who sank and died on the evening of the 26th, and Eliza Fulford, (case 11,) who died on the morning of the 27th.

Eliza Fulford's body was examined twenty hours after death. Over some portions of the extensive scalds vesication had commenced; but in other situations, especially about the abdomen and vulva, the destruction of soft parts was deep. The contents of the thorax and abdomen were carefully examined. There was no particular congestion of the lungs. The examination of the lining membrane of the alimentary canal gave no special indications; all the other organs were healthy; head not examined.

Case 3.—Albinus Puddy has continued in an alarming state since the 24th. His nights have been very restless; but he has dozed much during the days. To-day his pulse is 112, slower and fuller; tongue less dry; slept better last night; answers questions readily, but not correctly; the right leg is going on favourably; left leg continues much swollen; and, on the inner side of the limb, about the ankle, are some large sloughs; both legs are enveloped in poultices, supported by softly-cushioned splints on each side. He takes opium at intervals, with nourishment and occasional stimulants. His scalds, which are suppurating freely, are now dressed.

Case 5.—Francis Lucas. This patient, suffering from concussion of the brain, has quite recovered consciousness. His pupils, though still dilated, act moderately with the light. Mercurial action is now established. Last evening he became rather more restless and excited, and complained of increased pain in head. VS. ad ℥ x. Coagulum firm, but not buffed. He was relieved by the bleeding. To continue saline aperients and low diet.

Case 8.—Martha Hemmings. On the 24th her tongue was dry and striped, with considerable pain in epigastrium, increased by pressure. Eight leeches were applied to epigastrium, and repeated on the 26th with much relief. This patient's scalds were dressed with lint soaked in lin. calcis and cotton wool. The dressing was removed to-day for the first time since the accident. The injured surfaces were suppurating freely, and the skin and parts adjacent appear remarkably free from inflammation and swelling, presenting a better aspect than in those cases where the wool was removed earlier. The same circumstance was observable in Eliza Fulford, case 12, whose legs were examined to-day for the first time since the injury. In both these cases the parts are now dressed with ung. zinci.

Case 10.—Mary Dustin, with compound dislocation of the ankle-joint, is going on tolerable well. There has been considerable constitutional disturbance with much inflammatory swelling of ankle and leg. There is now pretty free suppuration from wound. Poultices are applied, and she takes opium every six hours with salines. Pulse and general condition improving.

Case 13.—William Bailey continued to go on pretty well until yesterday. On the 26th he had a bad night, and had an excited look all day. Stump dressed, looked well, and partially united. In the evening of the 27th patient became very restless, and violent delirium supervened during the night. In one of these furious paroxysms some hæmorrhage was induced from the movements of the stump. This, however, was arrested by the application of cold water. His pulse was at this time 130. This morning, as he continued unrelieved, though opium had been freely administered, the cold douche was employed over the cranium. This for a while tranquillised him. Violent delirium again occurring, chloroform was now administered. As this agent, however, produced increased excitement, followed by epileptic threatenings, its inhalation was discontinued, and more opium was given in porter. The patient is at present more tranquil, and apparently is under the influence of opium. The stump to-day looks badly, and the wound is quite open from the movements of the patient during the night. The skin, as high as the knee, looks dusky and threatening; pulse, 120. To have a poultice applied, and to continue full doses of morphia with beer. If any circumstances of particular interest should occur in the further progress of these cases, I will send you additional notices of them. I have been induced to trouble you thus far with the description of

these severe casualties, more on account of the great severity of the injuries sustained by the sufferers, than from their individual interest in a surgical point of view. Of fifteen patients admitted together into our infirmary, six have already died, and it is to be feared, from the complicated nature of the injuries of many of those still under treatment, that there may yet be other fatal cases. In the majority, the patients are suffering at once from the scalding effects of boiling water and steam at high pressure, together with most severe contusions and fractures, resulting from the direct application of great mechanical force. These varied injuries, to which we must add the shock of partial drowning, sustained by most of the sufferers, have rendered these cases so peculiarly urgent.

THE CHOLERA IN PLYMOUTH AND ITS NEIGHBOURHOOD IN 1849.

By Dr. EDWARD T. ROE,
Plymouth.

The approach and progress of the late epidemic of cholera in Plymouth were characterised by circumstances which, it appears to me, bear strongly on the question of the contagiousness or other means of propagation of that disease; those circumstances are, therefore, submitted to the examination of my professional brethren, as deserving of calm and deliberative attention and consideration, for it is a matter of no slight moment that we should arrive, if possible, at definite and clear views on points so vital, as whether cholera is or can be communicated by man to man, or carried in food or clothes from house to house, and if it can, what laws regulate such communicability; and, although I do not presume to hope that the experience of one individual or of one locality can settle so momentous and so much vexed a question, still every contribution may lend its share to bring about a consummation so desirable.

It is quite possible that I may have overrated the value of the facts recorded in these papers, or that they admit of an explanation different from the one I have given, or they may be held to be accidental or coincidental occurrences only, and as such, regarded as curiosities in medical experience, but of no further practical value; and if the reasoning by which either of these positions is maintained is clear and indisputable, none will rejoice more than myself, for I confess, that the last few months have made me to some extent a contagionist, and impressed upon me the conviction that a certain poisonous influence surrounds the cholera bed, which in habits broken down by poverty, dissipation, or sickness, is capable of producing the fully developed disease—while in persons not so circumstanced, varying degrees of contamination, causing corresponding degrees of disturbance from diarrhœa, down to mere nervous debility and depression, result; in other words, that a cholera poison can be drawn in by the breath, carried to the lungs, and absorbed by the blood, which thenceforth becomes diseased. If the dose of poison be weak, or the powers of life strong, or if there are circumstances or an idiosyncrasy tending to prevent a sufficient impression being made on the ganglionic system, to produce the fully developed disease—there may still be sufficient to cause diarrhœa, nervous feelings, prostration, &c., which may continue for an indefinite period, or even never be overcome; and while good air and sufficient nourishment are strong and powerful antagonists to every form of malady, still, if cholera were to become a frequent visitor or an endemic disease with us, few medical men could ultimately escape its ravages, exposed as they would be to the concentrated force of the poison, at times when fatigue, exhaustion, and distress might have broken down all the ramparts of health; but, if it can be satisfactorily shown, that cholera is caused solely by the overcrowding, filth, and starvation of the poor, and affects those so situated exclusively, then may we hope still to be spared to minister to the sick, and seek out the mysteries of the disease.

I am firmly of opinion that cholera will be found principally, but far from exclusively, to be dependent on individual contact or communication; that a person can carry it to others without being himself attacked; that when the air of a town is affected to a slight degree with cholera poison, local causes without contact may give rise to isolated cases of the disease, and that when imported into a town the sanitary condition of which is healthy, it will, finding nothing to feed upon, speedily disappear, as has been the case at Exeter and elsewhere; but if, on the other hand, it meets with a hotbed of filth, misery, starvation, and disease, then such scenes occur as have twice within the last eighteen years been enacted in Plymouth, and death mows down those whom a defective local legislation had allowed to rot while living.

I am fully convinced that cholera may, "by proper precautions, be shorn of its fatal strength," for it "derives its terrible power chiefly or entirely from the accessory circumstances which attend its attacks;" and human means, however powerless they have been, and perhaps ever will be found, when directed against cholera in its full-grown maturity and strength,—are all-sufficient, with God's blessing, to prevent its birth or destroy it in its infant stage of life. If such be the case, what an amount of responsibility have our rulers, Metropolitan and local, to bear, and what a weight of reprehension will attach to them if they neglect using every means in their power to destroy the haunts of the terrible and viewless enemy that may be again striding on to attack and

to desolate our hearths: their duty is then to arouse themselves and the people from their lethargy,—a lethargy which, if allowed to continue, may hurry multitudes into the abandonment of despair,—into the sleep of death.

The initiative must be taken by those in authority; it must be set about at once, so as not to assume an appearance of feverish anxiety to do mighty things in infinitesimal periods of time, for then alarm is the sole result. Experience has shown that the course followed during the last epidemic was wrong; then, although cholera had been seen for months steadily approaching our shores, it was not until the storm broke on the land that precautionary measures were thought of, and what would take months to carry out in safety was attempted to be done in days, at fearful peril, and with what success our Tables of mortality sadly show.

When the disease died away, the evidence of a desire to ameliorate the condition of the poor died too; and they, neglected and forgotten, have, of course, resumed their former habits, and returned to their accustomed haunts. This town is an example of the truth of my statement; nothing was done until cholera was at our very doors; then more was attempted than could be completed, and now the poor are rapidly sinking back into pollutions as bad and as numerous as they were twelve months ago. In saying this, I make no charge against our local authorities; they probably, in common with many others, thought cholera might not visit us, and, if it did not, expense would be unnecessarily incurred, and alarm causelessly excited, by any sanitary precautions being commenced in the time of panic; but now no such reasoning avails. The cholera came, and found us unprepared; it worked out its fatal problem with unerring accuracy; the abodes of misery it desolated, and scattered their plague-struck population, to carry the devastating pestilence far and wide. Should it again approach, cess-pools, unventilated houses, a scanty supply of water, and undrained streets, are the internal foes that will, if allowed to continue, open our gates to the enemy. The necessary measures may be costly, but money spent in improving the physical condition of the poor is wise economy; by making their homes more healthful, we cultivate and raise their moral standard, and check the expenses of criminal justice,—for it has been amply shown, that the great centres of disease are, at the same time, the nurseries and fortresses of crime; we check the expenses of pauper-relief,—for "a short-lived population is generally a surplus population, not only because those who are reckless of preserving life will be careless of all its obligations, and will be poor and vicious, but because the tendency of early deaths is chiefly to shorten the existence of those who produce more than they consume, and to increase the number of those who must be dependent on the charity of others." We shall add to our own security, as "we cannot separate ourselves from uncleanness and misery by mere walls and laws; filth and vice first drew cholera to their haunts as the loadstone draws iron, but, when once introduced within the limits of a city community, none were wealthy, or moral, or wise enough to be safe from its stroke."

It is time, however, that I pass from the consideration of my own individual opinions to the more immediate subject of these investigations; but previously to doing so, a brief sketch of Plymouth may not be unacceptable.

Within the last eighteen years Plymouth has been twice visited by cholera, and each time has suffered most severely from that fearful scourge. What were the characteristics here of the epidemic of 1832 have not, so far as I am aware, been recorded with any degree of minuteness, the only mementos handed down of it being the number of persons attacked and the deaths that followed, forming a gloomy statistical history of unsatisfactory exertions, of unrewarded efforts, and of almost unmitigated misery and desolation. Since then the town has been steadily increasing in size, houses have sprung up on every side, and its mighty arms have stretched to the neighbouring towns, so as almost to form them into one. This increase in bulk has not, however, been accompanied by increased attention to sanitary regulations, and the result has been, that while shops, railways, and docks are springing up with magical celerity, upwards of a thousand houses still remain undrained; many streets are in the same condition, and are still unsupplied with water, while cess-pools, piggeries, and slaughter-houses abound.

Much has been done by the local authorities towards correcting and removing these monstrous evils; but, with the limited finances at their disposal, many years must elapse before the needful improvements can be effected.

It is satisfactory, however, to see that a movement has been made in the right direction, and, although the work may be long, tedious, and expensive at first sight, it will, in the end, be found highly beneficial and economical to all classes of the community.

Plymouth may, for the purposes of description, be considered as divided into an upper, middle, and lower portion: the first being the new town, the second containing the principal streets and shops, and the last the wharves, warehouses, and residences of the majority of the poor. The new town is considerably elevated above the level of the sea, and is daily increasing in size; the only drawback to its salubrity is, that the drainage and the supply of water are as yet, in some cases, in a defective state, as might be expected from the newness of the locality. The middle portion of the town, which is very beautiful, need not detain us, and we will, therefore, pass on to the lower part, with which the immediate business of my subject has to do. Here still stand the houses which in former times were the abodes of affluence, but now peopled by squalor, misery, and disease; and many a noble porch and ample hall may be seen in the narrow streets which once held a pampered, liveried crowd, but now receive the shadowy shrinking forms—half clad, half starved—of those whose utmost art scarce keeps gaunt famine from their doors. The houses are high, the streets narrow, the gutters always full, the beer and gin shops numerous, and the air pestiferous.

Stonehouse-lane properly comes into this division of the town, although separated from it by the middle part; it consists of one long street, at the extreme western end of the town. Many years ago it was a creek or salt water marsh, and is now almost on the water level. The street drainage is good, but that of the houses very defective, and numerous abominations, in the form of cess-pools, &c., exist. Many of the inhabitants are thieves, Irish tramps, and the lowest class of prostitutes, and most of the houses and their occupants assimilate in appearance,—the one dirty and dilapidated, the other offensive and unclean. As is usual in such places, it is densely crowded.

Higher-street is at the extreme eastern end of Plymouth, nearly on the water level and near Sutton Pool, but separated from it by several streets. The inhabitants are English, and very superior to those of Stonehouse-lane.

The drainage of the town, taken as a whole, is not bad, and the water is excellent in quality, though at present deficient in quantity; but means are being taken to remedy this evil. All that we want is an effective and compulsory system of house-drainage, and the water placed upon the system of constant and universal supply, to render this town as healthy as any in the empire.

[To be continued.]

RAPIDLY FATAL CASE OF PERITONITIS.

By THOMAS F. CLAY, Esq., M.R.C.S.E.

S. H., aged 38, the mother of six children, within the last year or two, has become pallid, her flesh has lost its firmness, and during this time she had been occasionally subjected to bilious attacks; had slight hæmorrhage for three or four days; and, early on Saturday morning, June 29th, the contents of the uterus were expelled,—she believed she was about ten weeks pregnant. Some few hours after (11 a.m.), I was requested to see her, and found her pacing the room, and complaining of uterine, or, as she described them, "bearing-down pains," with slight hæmorrhage still going on. I was satisfied, from what she brought me, there was nothing left in the uterus; and considered the hæmorrhage to be, in vulgar parlance, "the cleansings." As there was nothing about her to require much interference, I desired her to go to bed, keep quite quiet and cool; and sent what I have generally had recourse to in similar cases—potass. nit. gr. x., tinct. opii. mv., inf. rosæ co. ℥i, 4tis horis. In the evening I again saw her, and found her complaining of headache, "flushes of heat." She had vomited a good deal of dark greenish oily fluid; and, although there was pain over the uterus, it was very little increased since I saw her in the morning, and bore pressure well; the tongue was moist, and but little coated; pulse 90, and easily compressed, soft. I desired hot fomentations to be applied to the abdomen; and, in the place of the astringent mixture, to take the effervescing

saline c. mj. of acid hydrocyan. in each dose, and a pill containing calomel gr. iss., pulv. opii. gr. ss, 3tis horis. On the following morning (Sunday, nine a.m.) I found her in a state of collapse—coldness of the extremities—pulse small and rapid, not to be counted distinctly—great restlessness—tongue dry and brown—abdomen very tender and slightly tympanitic; has not vomited since I saw her last night, but retched several times. I immediately gave her some wine, and ordered it to be repeated frequently. Seeing that little good was to be expected, and considering it a lost case, I asked a neighbouring medical friend to see her with me, which he kindly did. Leeches were applied, and afterwards a large blister. Calomel and opium continued. The blistered surface was dressed with mercurial ointment, but, as I expected, she continued to get worse, and died on Monday afternoon, the second day after the miscarriage. I was of opinion, from the fatal symptoms setting in so suddenly, that perforation was the cause; but a *post-mortem* examination proved I was in error—nothing but the usual appearances were to be found: patches of inflammation of the peritoneum lining the small intestines, lymph effused, with about a pint of serum in the pelvic cavity; the uterus, although slightly engorged was empty.

Stratford, Essex.

PAUPER PRACTICE.

By ALFRED EBSWORTH, Esq., M.R.C.S.

No. I.

DE GENERALIBUS.

In Union Practice is found every medical and surgical difficulty, however great, however long-standing; and you who are now studying may accept an appointment under the Poor-law Commission. I warn you of its ill-requited offices, I warn you of the dangers to which you are liable; that the appointment, far from leading you to honour and renown, leads only to vexation and to disappointment, and to the destruction of private practice. Nevertheless, to your hands will be committed an important charge; if you accept it, do the best for every case, be it hysteria or the formidable gangrene. Let not the consideration of money make you neglect either the one or the other, and live to learn, and learn to live, in whatever circumstances you may be placed.

Guardians will not favour you; *favour you the poor;*—order support to the afflicted; attend the lying-in woman, the fracture, or the scald, *without waiting for an order;* seek payment from the Poor-law Board, if refused by the niggardly overseer, the relieving officer, or the guardians. Poverty is a public, not an individual charge;—life, even the life of a pauper, is superior to money. I never knew a payment refused, *save in cholera*, where life was at stake; therefore, attend to all; be kind to all parish patients; save not your own physic, or the ordering of beef-tea, wine, fish, fowl, or ice, be they required. A life saved may be a Soul gained; and the credit of your cure may make your fortune. In subsequent letters I propose to point out a line of action in dangerous and difficult cases of disease, occurring in and among pauper patients where the young practitioner is removed from his brother *chips, hospital nobs*, and *F.R.C.S.'s* by examination, who have never seen or acted *in extremis*. I shall abuse boards of guardians as a whole, but uphold the system of Poor-law medical relief. I shall show how *ill used we*, some of us are, but how much we may *effect* by strenuous *opposition*,—by *combination;* and I shall in my next take up the subject of pauper midwifery, showing the *ins* and *outs*, from the attainment of an order by the pauper, to your payment by the Board of Guardians, illustrating my subject by natural, dangerous, and difficult.

After this subject is exhausted, I shall adjourn to other matters, and proceed *a capite ad calcem*, observing in my way that fractures of the skull, the base of ditto, the clavicle, the scapula, the ribs, are not paid for, although the most important in the human body. The Poor-law Board are enemies to their surgeons,—overpaid themselves, and, by their indifference, destructive to their species. No man should be on the Board who is not skilled by practice either as a clerk, surgeon, or relieving officer. Why should Viscount Ebrington, be placed in such a situation as secretary to a commoner like Mr. Baines—and he a man unacquainted with pauper politics—an emigration doctor. The science of pauperism and of emigration being very distinct, neither Lord Ebrington nor Mr. Baines are fitted for their posts; one is too kind, too succumbing to Boards of Guardians, and an enemy to the doctors; the other supercilious and time-serving.

The above sentiments are, I believe, but expressions universal in the profession.

Buttwell, Notts.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

Dr. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

DISEASES OF THE VAGINA, NOT SYPHILITIC.

The lining membrane of the vagina first assumes the characters of true mucous membrane, as it is reflected over the nymphæ. The external labia are composed of a fold of common integument, enclosing fat, muscular fibres, and glands. The secretion, then, at the entrance of the vagina, is derived from many mucous follicles situated under the lining membrane: some of these, below the clitoris, resemble, in structure and situation, Cowper's glands in the male; they were first discovered by Duvernay, in the cow, and, subsequently, by Bartholini, in the human female: others are imbedded in the external labia, near their posterior commissure, and open either by single orifices, or else in common receptacles, formed by a reflection of the lining membrane of the vagina, and called *lacunæ vestibuli vaginæ inferiores*. They are described by Weber, in his edition of Hildebrandt's Anatomy. If, from any cause, the narrow opening of these lacunæ becomes closed, the fluid accumulates in their interior, and a soft, painless, fluctuating swelling forms, which, projecting into, and partially obstructing, the entrance to the vagina, causes the patient considerable uneasiness. A free incision gives exit to a quantity of clear mucous fluid; the subsequent application of the caustic effects changes in the lacunæ, by which its cavity becomes permanently obliterated. These lacunæ not uncommonly become the seat of acute inflammation, terminating in abscess: whilst the inflammation lasts, the pain is severe, and the matter, when formed, is very frequently dark-coloured, from admixture with blood, and extremely fetid.

Anne R——, aged 20, a healthy young woman, who has been living, since she left home, two years ago, with an itinerant musician, as his wife, states, that, a fortnight before her admission to the hospital, she travelled a long distance on foot, and felt, in consequence, considerable soreness about the entrance of the vagina. She adopted such means as were in her power to obtain relief, but was not able to rest; constant locomotion produced swelling in both labia, and she applied at the hospital in great pain. Admitted, under Mr. Lawrence, July 1.

There is suppuration in both labia. From a spontaneous opening in the right, there is a discharge of extremely offensive bloody matter; puncture of the left side gave escape to a fluid of similar colour and consistence, and equally fetid.

Her countenance was worn; the pulse was small; and she appeared to have suffered considerably from the pain: for several nights she had obtained no sleep. She was ordered eight ounces of wine daily; meat diet; soap and opium pill, to procure rest, and proper applications to the abscesses. Under this treatment, she soon recovered.

Violence inflicted upon the lining membrane of the vagina in young girls may produce inflammation, which will terminate in sloughing. It is important that this fact should be generally known; because surgeons, in such cases, are often called upon to decide as to the syphilitic character of the affection, and a hasty opinion might lead to much inconvenience.

Mary G—, aged 14, in service, was admitted into the hospital, under Mr. Lawrence, with acute inflammation of

the entrance of the vagina; both labia and the nymphæ were swelled, and of bright red colour; and on the left side, there was a large black slough, not detached, the size of a crown piece, and apparently of some depth. There was general febrile disturbance; the skin was hot, and the tongue white. The girl refused to give any intelligible explanation of the affair; but circumstances seemed clearly to indicate that connexion had taken place some days before. The entrance of the vagina was extremely narrow.

Upon the separation of the slough, a deep granulating cavity was left, which healed in the usual way.

WOUNDS OF THE HEART.

Wounds of the heart, as seen in civil practice, are usually of small size, being inflicted for the purpose of self-destruction, by such an instrument as a fork, or long needle. Such wounds do not prove fatal from hæmorrhage so much as from inflammation of the pericardium, followed by effusion. Numerous instances, however, are upon record, in which patients have recovered from such an accident. Inasmuch as the only portion of the pericardium in direct contact with the thoracic parietes lies behind the sternum, and the lung interposes its anterior border between the heart and the costal cartilages, it is quite possible that a patient, drawing in a deep breath, and then plunging a fork obliquely backwards and outwards between the fifth and sixth ribs in the region of the heart, may miss that organ altogether and wound only the lung. The occurrence of emphysema would point out the nature of the injury. Some years ago, a patient was in the hospital, who stabbed himself six or seven times with a large carving-fork in this situation without any serious result. In the early part of April Mr. Lawrence brought to the museum of the hospital the heart of a lunatic who died from the effects of a wound produced by a needle, which still remained imbedded in the organ. The patient, aged twenty-eight, recently married, always of reserved and studious habits, became suddenly deranged, and, in a fit of melancholy, thrust a long needle between the fourth and fifth costal cartilages; the shock, combined with the knowledge of what he had done, restored to him the healthy exercise of his faculties; he became rational, explained what had happened to those about him, and was extremely desirous that an attempt should be made to extract the needle, which had disappeared under the integument. He died the fifth day after the occurrence.

Examination of the Body.—The vessels of the head were turgid, and there was general evidence of increased activity of the cerebral circulation. The internal surface of the skullcap was uneven, although the bone did not actually present morbid appearances. The vessels of the bone were full, so as to give it a livid appearance when held against the light. The pericardium, distended far beyond its usual size, was in contact with the sternum in a breadth of nearly three inches in the lower half of the chest; it ascended within an inch of the upper margin of the bone. It contained some ounces of opaque, yellowish, sero-purulent fluid. The serous surface, both of the pericardial sac, and of the portion of the membrane reflected over the heart, was covered universally by an irregular layer of soft yellow fibrine. An ordinary sewing-needle, about two inches in length, had penetrated the left ventricle obliquely; the eye was a little below the surface, so as not to be seen until an incision had been made; the point projected into the cavity; the ventricle was hard and incompressible, and the muscular substance, which resisted the knife from its firmness, was very compact, and rather paler than in the normal state.

The distension of the pericardium had depressed the diaphragm, and thus pressed the left lobe of the liver and the stomach into the umbilical region. Both pleuræ were inflamed with slight partial effusions of fibrine, this inflammation being most considerable on the left side, with recent agglutination of the lung to the pericardium.

PUNCTURING DISEASED JOINTS.

It is recommended in cases where a synovial membrane becomes very much distended by its secretion, that an exploratory puncture should be made with a grooved needle, and that the fluid which escapes should be examined. "If it be serum, two or three more punctures may be made, and an exhausted cupping glass be applied over them. If it be pus, a free opening should be made with a lancet, in a depending position, so that the matter may run out easily." These directions would lead to the inference, that the operation of puncturing a diseased joint is one commonly practised, and capable of being performed with benefit and safety to the patient. Experience, however, shows, that in a very large number of cases so treated, the temporary relief afforded by the evacuation of the sero-purulent fluid secreted by the inflamed synovial membrane is speedily overcast by the excruciating pain attending the process of acute ulceration of the cartilaginous surfaces of the bones; violent constitutional disturbance supervenes, and the patient either dies with hectic fever, or has to submit to the amputation of the limb. It has not fallen to me ever to witness any benefit to the patient from the laying open of such a joint as the knee under any morbid conditions; sooner or later the limb has been amputated, the articulating surfaces having been completely destroyed by ulceration: but I have seen several cases in which adherence to the rules above mentioned has placed a patient in a far worse state than would have been caused by his disease, and has exposed him to no inconsiderable peril of his life. Cases may occasionally arise in which pus confined in a disorganised joint, and tightly bound down by the distended integument, may be evacuated without damage to the patient, the joint having ceased to exist as such; but it may be laid down as a rule, that so long as the articular extremities of the bone are covered by cartilage and synovial membrane, all exploratory punctures and lancet cuts are inadmissible. They lead to a train of events by which the patient will be in the greatest hazard of losing the limb. An interesting case illustrative of some of the points here mentioned occurred in the hospital in the early part of this year. A healthy man consulted a surgeon in September, 1849, in consequence of stiffness and uneasiness of the right knee, which, though moveable, swelled and became painful, if much used. There was at times considerable pain, especially about the inner border of the patella, where there was a prominent and elastic swelling, containing fluid. After the usual treatment, rest, the application of leeches and cold lotions, a lancet was introduced into the elastic swelling, near the inner edge of the patella, and there escaped some thin glairy fluid. Shortly afterwards the pain became much more severe; he was permanently confined to his bed; abscesses formed about the inner condyle of the femur; the cartilages and some of the ligaments were destroyed, and the bones of the knee became dislocated; worn out by suffering and emaciated from hectic fever and diarrhœa, he came to the hospital nine months after the lancet puncture, for the purpose of submitting to the removal of the limb. The operation was performed in the usual manner by Mr. Lawrence, May 24, 1850. No unfavourable symptoms supervened, and the wound healed in the usual time.

Examination of the Limb.—The tibia and fibula were thrown forwards; the patella, quite movable, rested against the external condyle of the femur. Adhesions of the synovial membrane had divided the joint into three separate compartments: one between the patella and the front of the femur; a second between the outer condyle of the femur and the outer articulating surface of the tibia; and a third between the inner condyle of the femur and the inner articulating surface of the tibia. Of the first and second compartments nothing need be said, except that the cartilage covering the bones was undergoing that slow, painless absorption seen in joints which have been long disused; the synovial membrane was in a perfectly healthy state. In the third compartment, between the inner condyle of the femur and the inner articulating surface of the tibia corresponding with the situation of the lancet puncture, the articular cartilage and the semi-lunar fibro-cartilage were completely removed, and the denuded bones, rough and uneven, fitted into one another, so as to partially lock the joint. Fragments of bone, varying from the size of a pea to that of a bean, were completely detached, and lying loose in the joint; the remains of the synovial membrane under the quadriceps extensor cruris were thickened, pulpy, and of light brown colour; some portions formed small cavities containing pus, from some of which proceeded long fistulous passages which opened either into the joint or into the popliteal space. The external lateral ligament was softened and elongated but entire; the internal lateral ligament was softened and spread out, and much changed from its normal state; the tendons about the joint were of natural appearance and consistence, but the muscles were pale, and imbedded in a quantity of effused serum and fibrine.

There can be no doubt but that in the case here related

there was no active disease of the joint until the unfortunate puncture made by the lancet; nature then endeavoured to limit the mischief by cutting off from the rest of the articulation the part in which this active disorganisation was going on, but the patient's health sank under the constitutional disturbance and protracted suffering. It may be said that no opening should be made in a joint unless the cavity contains pus. Who can be sure of the character of its contents? and in what is the patient benefited, if after the evacuation of the pus such serious disorganisation ensues as was witnessed in the case here related? Although it is doubtless true that there is a great difference between cutting into a diseased and a healthy synovial membrane, it is equally certain that doing either the one or the other should be undertaken only in extreme and special cases, with the full knowledge on the part of the surgeon that the patient may thereby be exposed to the most serious and active form of disorganisation to which a joint is liable. H. C.

KING'S COLLEGE HOSPITAL.

BY

HENRY SMITH, Esq., F.R.C.S.,
(Formerly House Surgeon to the Hospital.)
AND
ROBERT C. R. JORDAN, Esq.,
House Physician.

CASE OF ULCER OF THE STOMACH.

Harriet Lee, aged 43, a married woman, and the mother of several children, was admitted into King's College Hospital on the 29th of June, under the care of Dr. Budd.

Her health appears to have been always delicate, and, for the last ten years, she has been subject to water brash, bringing up small quantities of clear fluid almost every day. This was sometimes of an acid, but usually of a saltish, taste. She also suffered from occasional pain in the stomach during the same period. This generally came on after meals.

Three and a half years ago, at the birth of her last child, she had rather a lingering labour, and after this, in spite of being weak and out of health, she suckled the child herself for two years. After her confinement, all the symptoms increased in severity, and for the last three years, with very few exceptions, she has vomited her food every day. This sickness did not come on immediately after eating, but a short time after. It seldom occurred in the morning, before she had taken her dinner. The vomited matters were often streaked with blood.

During this same period she has had constant burning pain in the epigastrium. This seemed to be increased after taking food. Vomiting generally gave her immediate relief, and the only time in which she was free from pain was for about two hours after the sickness. The bowels were generally rather confined. She has latterly felt convinced that the symptoms were aggravated by taking beer, spirits, meat, hot fluids,—as tea and coffee, &c.,—but she has never abstained from these for more than a day or two at a time.

She continued in this state until the 24th of June, when, after a day of unusual exertion, she felt much exhausted, and went to bed. About half-past two in the morning she woke up very faint, and almost immediately vomited about a pint of dark black blood; she was much purged at the same time, but the motions were not examined. This was the first time she had ever vomited blood, with the exception of the rejected food being occasionally slightly streaked with it; since this, in addition to the stomach symptoms, she has suffered from the usual effects of loss of blood, as throbbing pain in the head, ringing noise in the ears, sleeplessness, &c.

She was admitted on the 29th, four days after the hæmatemesis, and was then very pale and anæmic in appearance.

On examination no tumour of any kind could be detected in the abdomen. There seemed to be a general sense of uneasiness on pressure, over the whole epigastric region; but not more marked in one part than another.

Neither the liver nor spleen was enlarged, nor has she ever suffered from ague. The heart and lung sounds were natural; the catamenia have been quite regular, and also sufficient in quantity.

She was immediately placed on a diet consisting entirely of milk and flour; and, with the exception of occasional aloetic purgatives, she took no medicine until the 12th of July, when she was ordered ℥ss. of the trisnitrate of bismuth three times in the day.

The improvement under this system of regimen was very decided. Once or twice since the first day of her admission she has had slight uneasiness, referred to the stomach; but these pains have been very transient, and she has never once vomited.

For the last ten days she has been allowed a little beef-tea, at first mixed with the milk and flour, and afterwards taken alone; to-day (July 25th) she has for the first time been permitted to take a small slice of meat; the stomach has borne this well.

For the last ten days she has been completely free from pain; the anæmic symptoms are gradually disappearing, and she may now be called convalescent.

In such a marked case as this there can be little doubt of the existence of ulcer in the stomach. That these ulcers do heal, we have abundant *post-mortem* evidence, and a favourable prognosis may now be given with some confidence in this case. The difficulty of cure often depends on the patients themselves, who, when relieved of their more pressing symptoms, can rarely be brought to adhere strictly to any regimen prescribed for them, unless, as when in an hospital, they are obliged to do so. R. C. R. J.

ST. GEORGE'S HOSPITAL.

By HARVEY B. HOLL, Esq., M.R.C.S.,
Curator of the Museum.

FIBROUS TUMOUR OF THE BREAST.

On Thursday, the day on which the operations at St. George's Hospital usually take place, several patients were introduced to the theatre. The first of these was a girl, about twenty years of age, affected with chronic mammary tumour. The disease, which had attained considerable size, was of about fourteen months' duration, in the latter part of which it had given her some inconvenience. It was situated at the upper margin of the gland, to which it appeared to be but slightly connected. The case presented no peculiar interest, and is only mentioned because Mr. Hawkins, whose patient she was, preferred in this instance to dissect the tumour away from its capsule, leaving the latter behind; observing, at the same time, that in tumours of this description, when of rapid growth, it frequently happens that their connexion to the cyst is less firm than that of the cyst to the surrounding structures, and therefore the hæmorrhage attending the method he was about to pursue was considerably less. The separation of the morbid growth was effected without difficulty. It was somewhat larger than a walnut, but slightly lobulated, and under the microscope presented the usual appearances met with in this kind of tumour, being composed of lactiferous ducts, distended with nucleated cells, each nucleus containing a nucleolus, and between these ducts a large development of adventitious fibrous tissue.

OSSEOUS TUMOUR OF THE HAND, NOT CONNECTED WITH THE BONES.

After Mr. Tatum had performed an amputation of the leg, and Mr. Johnson had excised a sebaceous tumour, Mr. Prescott Hewett proceeded to remove a small but very rare description of tumour from the hand of a woman who had reached the middle period of life. It was apparently a hard and resisting lobulated growth, situated over the palmar aspect of the shaft of the metacarpal bone of the index finger, rather towards its carpal extremity, very moveable, and seemingly quite unconnected with the bone. Its removal was effected by making an incision along the long axis of the tumour, and in doing which a small bursa was met with between it and the integuments. The tumour was imbedded in the areolar tissue between the adductor pollicis and the first inter-osseous muscles, and had no other connexions except to the sheaths of the flexor tendons of the finger. It was about the size of a small walnut, and resembled a mulberry calculus in its irregular figure and rough appearance; it was composed entirely of very compact bony tissue, without any trace of cartilage, and was invested by a periosteum. The patient stated that it had been five years in attaining its present magnitude, and was attributed by her to a sprain or bruise inflicted with a key. It was not painful

except when it pressed upon contiguous parts, but it interfered with the movements of the finger and thumb, and prevented her from pursuing her occupation, which was that of a sempstress, in consequence of which she was desirous of having it removed. Contrary to the usual custom at this hospital, chloroform was not administered in this instance, at the request of the patient herself.

These bony growths are sometimes developed in various parts of the body simultaneously. This was the case in a young man who was in the hospital in 1844, under Mr. Hawkins, in whom a multitude of these tumours existed, one of which was removed by operation,(a) and other cases have been collected by Mr. Stanley, in his Work on the diseases of bone.

OPERATION FOR THE REMOVAL OF A SUPERNUMERARY THUMB.

The last operation consisted in removing a supernumerary thumb from the hand of a young woman, likewise a patient of Mr. Hewett. This supplementary member comprised two phalanges, the last a very long and slender one, on which the nail was freely moveable, and made that which was really only the inguinal phalanx appear to consist of two phalanges, which would have constituted it a finger instead of a thumb. In removing it, Mr. Hewett made a circular incision round its upper part, and performed an amputation, in preference to an excision at the joint; and his reason for doing so was, that it has occurred in some instances, that the same synovial membrane has supplied the metacarpal joints of both thumbs; and, when this is the case, the cavity of both joints must be opened, thereby inducing inflammation, and perhaps ultimate disorganisation, in the metacarpo-phalangeal articulation of the remaining thumb—a point to be remembered as one of some importance in practice.

DISEASE OF THE WRIST.—AMPUTATION.

The subject of this operation is a servant-girl, the previous history of whose case is its most interesting feature; as in all probability its future progress will be so favourable, and so unmarked by any untoward circumstance, that we shall have nothing to add to it beyond the simple statement of her having left the hospital perfectly recovered. Such is the prognosis we are at present warranted in delivering.

It appears from her statements, for which we are indebted to the kindness of Mr. Smallman, that some ten years ago she pricked one of the fingers of her left hand with a fish-bone. This was followed by an unhealthy inflammation, which slowly extended to the wrist, subsiding, at the same time, in the parts it had first of all invaded. Two years and a half ago it became so bad, and the use of the hand was so much impaired, that she was compelled to give up all work, and remain twelve months at home with her parents, at the end of which time the disease and lameness had become in some degree meliorated. Soon after this, however, the disease attacked the back of the wrist and fore-arm, and at last became so menacing that she was obliged to enter the hospital on May 22. It was found, on examination, that there could be but little chance of doing her any good except by amputation; but she was then labouring under too much constitutional irritation to admit of this being carried into effect.

Mild aperients and sedatives were accordingly resorted to, and the acetic extract of colchicum, combined with Dover's powder, was given, and followed up by salines. Under this treatment she improved so far, that, on the 11th of July, Mr. Johnson judged her in a fit state to operate on, and accordingly removed the fore-arm at the junction of the middle and upper thirds by the modified flap operation,—a plan which surgeons frequently adopt now, in order to steer safely between the Scylla and Charybdis of the flap and circular operations. In addition to the radial, ulnar, and interosseous arteries, two or three muscular branches were so much enlarged as to require ligatures, but only a small amount of blood was lost. The chloroform was administered.

On examination, it was found that the part was irremediably diseased. The radius was necrosed, and the first row of carpal bones carious; the second row also invaded; and, to complicate the matter still further, the cartilages were ulcerated.

July 18th.—Up to the present time the case has progressed most favourably; her tongue is clean; her appetite good; sleep but slightly disturbed by the twitching in the stump. Except at the upper part the incised surfaces have united by the first intention, and only one ligature is left adhering. We hope to be able very shortly to subjoin the termination of this case.

(a) *Medical Gazette*, May 31, 1844.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

By Dr. ROBERT TAYLOR.
Physician to the Hospital.

OBSERVATIONS ON STRABISMUS.

After performing several operations for squinting, Mr. Walton said, that he was induced to make some remarks connected with the subject of strabismus, in consequence of his opinion having been asked by a gentleman present, respecting the plan of dividing the faulty muscle by a hook-shaped knife, in the manner described in a late number of the *Medical Times*, under the head of "Operations at the Royal Free Hospital." The operation in question was by no means new. It was for some time in vogue during the squint-cutting mania eight years ago. He had himself tested every mode of operating on squint that had been before the public, and had come to the conclusion, that the one most to be depended on—as well for favourable results as for the safety of the parts concerned in the operation—was that which had just been adopted; namely, opening the conjunctiva with scissors, securing the muscle with a blunt hook, and then dividing it upon the hook with the scissors. It had been said, that no force would enable the curved knife to injure or penetrate the sclerotica. It appeared to him, however, that any instrument which was sufficiently sharp to penetrate the conjunctiva, might, without the application of much force, wound the sclerotica. It must be remembered, that, to secure the muscle in a proper manner, the instrument employed must be swept along the globe from below, to above the insertion of the muscle, otherwise a part only of the muscle would be taken up. There was, therefore, a risk of the surface of the sclerotica being scraped by a sharp instrument, to say the least of it; and why run the chance of injuring the globe, and implicating it in an operation in which its appendages alone are concerned, and need be involved? That in converging squint, there was frequently, at the inner cornea of the eye, a thickening of the conjunctiva, and of the subconjunctival tissue, which latter appeared to be sometimes arranged in layers, or, at all events, could be easily separated into such by dissection. He thought it impossible, in such cases, for the operator to know when the knife was passed sufficiently deep, unless he pressed it firmly against the sclerotica, which constituted his principal objection to the use of it. His rule never to introduce the blunt hook until a small portion of the sclerotica had been bared, always ensured a proper passage for it.

When the conjunctiva is divided from within outwards, even with the sharpest knife, it never cuts readily; much of it is pulled or stripped away from the surface of the globe. Now, curved knives are seldom very sharp, as it is difficult from their form to make them so. The only instance of accident that had come under his knowledge during the operation for squinting, occurred to a surgeon who divided the conjunctiva with a curved knife, instead of a pair of scissors, to make an aperture for the blunt hook to be introduced. The sclerotica was wounded, and the globe suppurated. There were cases in which the use of the curved knife for the purpose of dividing the muscle was attended with much danger to the eye; when, for instance, a second operation on a squinting eye was required, in consequence of the first having been imperfectly executed, the muscle not having been thoroughly divided, (a case of which had been at the hospital last week,) the conjunctiva invariably became intimately adherent to the globe, and bound down the muscle, as far as it was reflected over it. It required careful dissection of the conjunctiva before the muscle could be taken up with the blunt hook. With such intimate adhesions between the parts, how could any operator keep the knife sufficiently clear of the sclerotica, or avoid injuring it, if the muscle is to be divided in the proper place near to its insertion.

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THE MEDICAL TIMES.

SATURDAY, AUGUST 3.

THE *MEDICAL TIMES* AND THE DISTRICT LUNATIC ASYLUMS OF IRELAND.

Well! the *Medical Times* has at last effected some good for the Profession even in Ireland. Our readers have been long ago aware, what a curious spectacle, as Medical Institutions, the Lunatic Asylums of that country presented. We pointedly and clearly exposed the fact, that there did not exist, at that time, in any of those great hospitals, containing from 140 to 400 patients each, even *one* resident medical superintendent, acting and recognised by Government as such; and that an educated stranger visiting Ireland might be inclined to infer, that Lunatic Asylums there had been built in the most expensive manner,—not for fellow-creatures afflicted by Providence, but for criminals or outcasts of society.

We undertook, at fearful odds, and against no ordinary antagonists, the task of correcting this anomaly; and, after battling with every argument which interest or selfishness could supply—after meeting and overcoming every obstacle which intrigue or clique-ism could, publicly or in private, bring to their aid,—we have at length succeeded in breaking down that exclusion of medical men from their proper position as resident medical superintendents of the Irish Asylums, which had so long and so steadily been persevered in. Five out of the twelve great Asylums in Ireland devoted to the treatment of the insane poor of that country,—namely, Belfast, Limerick, Carlow, Clonmel, and Dundrum,—now possess resident medical officers, owing—we are proud to proclaim it—mainly to our efforts and exposure of the system. Seven still have no resident medical officer; they are Cork, Waterford, Armagh, Ballinasloe, Derry, Richmond, and Maryboro'. This is a state of matters which, with all possible despatch, should be remedied; and, from the hopes held out that the salaries of all officers nominated by the Crown are to be henceforward paid by the Government, (and Lunatic Asylum officers in Ireland are so appointed,) it is not too much to expect that resident medical men will be at once appointed by the Irish Executive, so as to bring the system into something approaching uniformity and simplicity of action. In fact, it only requires the exertions of some honest and active Member of the House of Commons to have the business at once and for ever arranged.

In claiming from our medical friends in Ireland—and we are happy to say that they are not few in number—fair acknowledgments for the services thus rendered to them at our hands, we do not desire to lessen the obligations, which all in common must feel, to the present Inspectors of Lunatic Asylums in that country,—we mean, Drs. White and Nugent.

These two gentlemen have done much good by advocating a fair measure of justice to their professional brethren; but, when we bear in mind how they are circumstanced, and how circumscribed are their influence and power, (not having even the nomination of their own clerks in their own office, as the Commissioners of Lunacy in England possess,) we must make great allowances for the slow progress which reform has made in their department, and which would have been far *slower*, were it not for the power which an honest and influential Medical Journal exercises over the educated classes in Great Britain. Moreover, we must not forget that all appointments in their department (we will not hint at *promotions*, for they rarely, *if ever*, take place) rest with the Executive of the day; and that the opponents to any system or modification of a system, which goes to circumscribe *in Ireland* the range of Parliamentary patronage, or keep it within certain limits, and those limits, as in the present case, *Medical* ones, are indeed legion.

We have been led to make the above remarks by the perusal of a report on the Clonmel Lunatic Asylum for the year ending 31st March, 1850, by Dr. Flynn, its resident physician, who, in a brief and unpretending manner, has put forward a number of very curious and striking facts, tending to prove, that although much has already been effected in Ireland with regard to the improved treatment of the lunatic and the advancement of our profession, by recognising, on the part of the Government, its just rights to the medical superintendence of the lunatic hospitals of that country, much, very much, yet remains to be effected.

In subsequent numbers, we may notice many of the facts stated by Dr. Flynn; confidently trusting, that the light thrown on this interesting matter by us may urge on the authorities to complete those salutary changes so essentially necessary to the sound and uniform action of a great public department.

THE BRITISH MEDICAL FUND.

More than once we have had occasion to speak of this *Provident and Relief Society for the Medical Profession*, in terms of strong commendation. It will be seen by the Report in another column, that the first meeting of the members took place on the 31st ult., and that the Society was then formally established, and declared to be in complete working trim. As was expressed in the Report presented to the meeting, we believe that the Institution of this Society constitutes an important epoch in the civil history of the medical profession. By means of it, as has been well said, the attempt is now, for the first time, made to unite all the members of the profession into one body, for mutual support and defence, in their social capacity, without regard to title, rank, fortune, class, or locality, on the common ground of humanity and professional brotherhood. The following passage, which occurs in a prospectus issued by the Provisional Managing Committee, expresses, in excellent terms, the true fundamental principles on which all Societies like the present are based, and must be reared:—

"It is a principle universally recognised by men qualified to judge of human affairs, and especially by those who have devoted themselves to the cure of the social maladies of these latter times, that the only safe and sure mode of relieving and removing the distresses and difficulties of men dependent for support on their own exertions is, the union

and co-operation of the individuals themselves, with the direct purpose of meeting and overcoming the evils to which their particular lot is especially obnoxious. Such is the providential arrangement of human affairs, and such the harmonious relations of events bearing on these, that a system of *universal compensation* is found to prevail, whenever men take pains to seek for and to evolve it. By means of this principle, most of the inequalities of lot among mankind at large might be successfully coped with, if men made a proper use of their reason, under the guidance of philanthropy and benevolence. In particular classes of men of limited extent, united by special ties, and having all their great interests in common, these individual inequalities might, for the most part, be easily met; and, much to the honour of our own times, in a great many cases they are so met. All that is requisite to effect this most desirable result is, that the individuals of the co-operating body shall consent, during their *ordinary or average state*, to make a trifling sacrifice of present means, a mere fractional deduction from some of their present superfluities or indulgences, or, at most, of their dispensable comforts, in order to provide that *general compensating medium*, to which they may look in the event of their falling below this ordinary or average state. Those who are so fortunate as not to require such compensation, have, by this arrangement, the gratification of knowing and feeling that they have prepared against the contingency which was as likely to be their lot as another's; while, at any rate, they have administered to the necessities of their less fortunate brethren who, in a reversed state of things, would have been the benefactors and not the benefited. Money being now the universal representative of things relating to man's material wants, it is, of course, by means of it that the co-operative and compensative principle is carried into practical effect. It is in this point of view, that a mere trifle deducted from the weekly, monthly, or annual income of any set of men—scarcely at all missed at the time—may be made to return to them, in the day of their necessities, multiplied a thousandfold; and stand to them as strength in their weakness, health in their sickness, competence in their poverty, vigour in their old age, and even take the form of blessings to those nearest and dearest to them, when they themselves have paid the great debt which all must pay."

The founders of this Society, however, justly felt, that an *exclusively provident* institution could not meet all the necessities of the cases which they had undertaken to provide for; and, therefore, conjoined with the provident part of the Society, a department of a purely charitable kind,—purely charitable, but still restricted in its operations to the members of the Society and their families. The same document quoted above, thus expresses the general reasons for connecting this branch with the other:—

"While, however, resting their main hope of benefiting themselves and fellow labourers, on the grand principles of provident co-operation and mutual support, the Committee of Management could not overlook the possibility, nay, the certainty, of the occasional occurrence of instances of distress which no foresight could anticipate, and no economical combinations could fully cover. The events of human life scarcely admit of such perfect calculation as to leave no room for failure or mistake; and assuredly, the actions of human beings are not, and cannot be regulated by such wisdom as to keep them always provided against the evils which prudence might avert. Sickness may cut down, death may remove, the youthful and the strong before it was *possible* for them to provide sufficiently for the necessities either of the present or the future day; and, knowing his own weakness of purpose, it does not become any man to pass too severe a judgment even on those who, strong in the hopes of vigorous manhood, may have unwisely put off to a day which never came, that provision for themselves or others which it was their duty to prepare. It must sometimes even happen, that the most perfect arrangements of societies of the mutual kind, like that now contemplated—limited as the total amount securable by the premiums of individual members must necessarily be—will not be able to cope with the exigencies of exceptionable cases."

It has been for these and other such-like reasons that it has been deemed essential to the completeness of the Institution, to superadd to the Provident Branch a Benevolent or Relief Branch. Such an addition is, indeed, only the natural complement of the Provident Branch, and is absolutely necessary, in order to make the dispensation of the benefits co-equal with the requirements.

The following is a brief outline of the whole plan comprised in the British Medical Fund:—

"I.—THE PROVIDENT BRANCH.

"The Provident Branch is strictly a self-supporting fund, being independent of all other sources of supply except the premiums of the members subscribing to it. The following are the different forms in which these benefits will be obtainable:—

"1. Deferred annuities to the members themselves (varying from 10*l.* to 100*l.*), to commence at any specified age, from 50 to 70, and to be payable to the subscribers during the remainder of life, without regard to the state of their health, or amount of income from other sources.

"2. Annuities (of like amount) to the widows of members, on the principle of survivorship; that is, to commence immediately on the death of the subscriber.

"3. Annuities (of like amount) to the children of members individually, on the same principle of survivorship.

"4. Family annuities (of like amount) to the whole children of a family conjointly, on the same principle of survivorship.

"5. Allowances during sickness, or other incapacity, temporary or permanent, to commence at any age, on the occurrence of the incapacity, and to be payable during its continuance up to the age of 70, in weekly or monthly sums proportioned to the total amount of the annuity subscribed for.

"6. Fixed sums (not exceeding 200*l.*) payable, on the death of the subscribers, to their heirs, on the ordinary principles of life assurance.

"II.—THE RELIEF FUND.

"It is intended to form this fund out of the annual and life subscriptions of members, and from donations, bequests, and all the other means whereby charitable institutions are usually supported. Among the many objects contemplated by this branch of the Society, the following have been particularly considered by the Managing Committee:—

"1. To grant advances to such of the subscribers for annuities, sickness allowance, or life assurance, as may be unable, from sickness or other causes, to pay their premiums when due.

"2. To make donations to members who may be disabled by disease, or otherwise in reduced circumstances.

"3. To grant relief, under similar circumstances, in special cases, to the widows and orphans, or other near relatives, of members.

"4. To augment, by annual grants, the annuities of widows or orphans, when, from particular circumstances, they are found inadequate.

"5. To grant loans to members of a certain standing, at low rates of interest, or even without interest, under special circumstances.

"6. To grant sums for building, or assisting to build, or otherwise providing cottage retreats, or other residences, for decayed members or their widows."

In conclusion, we cannot but reiterate an opinion, that, in the British Medical Fund, now instituted under such favourable auspices and with such flattering prospects, the members of the medical profession in this country will find an institution combining all the best requisites, both of personal providence and benevolence, and exactly suited to meet the evils which most afflict them, both in their professional and social capacity. We fervently wish it all success.

THE NATIONAL INSTITUTE.

RESIGNATION OF MR. ROSS.

In the resignation of Mr. Ross, the National Institute has experienced a very great loss; nor do we know from whence the same extent of talent and general knowledge displayed by that gentleman during his tenure

of office, and the possession of which so well fitted him for its duties, will be supplied. For the sake of the Institute we very much regret the resignation which has taken place. That body, however, have not been insensible to the merits of their former Secretary; and the following resolution, passed at a late meeting of the Council, speaks more forcibly than any words of ours, as to the estimation in which Mr. Ross was held, and in which his great services were regarded:—

"That this Committee, having received a communication from George Ross, Esq., announcing his resignation of the office of Secretary to the National Institute, desires to express its sincere regret that circumstances have deprived the Institute of the valuable services of their late very able Secretary. The Committee cannot, however, accept this resignation without formally recording the high opinion it entertains of the zealous, talented, and disinterested services rendered to the Institute by Mr. Ross during the period that he filled the very responsible and arduous situation of Secretary; and it hereby unanimously resolves, that its cordial thanks and best wishes be presented to Mr. Ross, and that the same be duly recorded upon the minutes."

HOUSE OF COMMONS.

THE MEDICAL PRACTITIONERS' INCORPORATION.

Mr. Wyld, in moving for leave to bring in a Bill to incorporate the general practitioners of surgery, medicine, and midwifery, said, it would not be necessary for him to detain the House more than a few moments, as he was happy to state that he had obtained the assent of the Home Secretary to the introduction of his Bill. The object of his motion was to incorporate the general medical practitioners, and to give them the power to institute examinations into the qualifications of those who wished to pursue the general practice of the medical profession. He merely proposed to lay the Bill upon the table, as he did not intend to take any action upon it during the present session of Parliament.

Colonel Thompson seconded the motion, which was agreed to; and leave was given to bring in the Bill.

We will hazard no speculations upon the Bill which has been brought into Parliament by Mr. Wyld. As soon as we receive it, its contents shall be carefully analysed, and laid before our readers with our remarks. At the same time, we cannot but congratulate our professional brethren at this appearance of movement in the Legislature towards the settlement of so important a question.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on Diseases affecting the Skin. By the late Anthony Todd Thomson, M.D., F.S.S. Completed and Edited by Edmund A. Parkes, M.D. London. Pp. 436. 1850.

The present work was left in an imperfect state by Dr. Thomson; but his great practical experience in this branch of the profession, induced Messrs. Longman to complete the publication with the assistance of Professor Parkes, of University College. This task has been fulfilled with extreme care and much ability; and the work accordingly is to be considered as a full, complete, and practical treatise on the subject it professes to elucidate. From the editor being familiar with the doctrines and practical precepts of the author, it presents that unity of character which it is not always our fortune to meet with in works consigned to the care of different writers. About 300 pages of the work were completed by the author; the remainder of the publication, with the exception of the articles Acne and Sycosis, is from the pen of the editor.

The work is preceded by a brief memoir of the author, detailing some of the leading circumstances in his professional career—truthfully, we have no doubt, written, but we feel that we cannot add tastefully. We are not informed if this memoir be written by the editor; report, indeed,—and we believe it,—ascribes the authorship to Mrs. Thomson. If by Dr. Parkes, it is wondrous modest; if by Mrs. Thomson, it is unjust to the editor. Dr. Parkes attended Dr. Thomson with the most indefatigable assiduity during his illness; he visited his patients for him; he read his lectures for him; but his services are scarcely named,—an omission, however, which is amply compensated for by the able and sound judgment with which the editor has performed his task of completing the work.

The book, eschewing all the nicer refinements and subtleties of classification, may justly claim for itself a decidedly practical character. The editor truly observes, "For more than thirty years Dr. Thomson had paid especial attention to diseases of the skin; he had observed them with great care and accuracy, and had learned to treat them with singular success." "At the close of his active and useful career, it was his greatest wish that his experience should be made useful in aiding his professional brethren in the great object of all practical men, viz., the safe and rapid cure of disease."

The subjects are embraced in ten chapters and an appendix. The heads of these we summarily append, as we consider the arrangement highly appropriate and practical:—

I. Febrile contagious diseases, non-recurrent except in exceptional cases.

II. Febrile contagious diseases, capable of recurring many times during life.

III. Non-febrile contagious diseases.

IV. Non-contagious febrile diseases.

V. Non-contagious, non-febrile diseases, chiefly connected with, and characteristic of, derangements of the digestive, assimilating, and secreting organs; subdivided into the old orders of *papulæ*, *pustulæ*, *vesiculæ*, *squamæ*, *tubercular, and hæmorrhagie diseases of the skin.*

VI. Diseases, not included in the former divisions, or of doubtful position.

VII. Syphilides.

VIII. Non-eruptive morbid states of the skin.

IX. New formations on the skin.

X. Diseases of the nails.

Appendix. Embracing the consideration of particular points in anatomy and pathology.

The book is avowedly of a practical nature, and it would be out of place to make any observations on the above classification, or, rather, mode of grouping the diseases. The principles of a correct classification are only to be discovered and scientifically determined when individual relations have been clearly established and recognised; and it is, accordingly, no fault of the practical physician, if he cannot specify the exact local habitation and name of a disease in the nosological chart. Even the pure physical philosopher is unable to say what substances really are elements and what are not.

The value of the very excellent work before us is enenhanced by a series of cases, indicating the *methodus medendi* in a satisfactory and explicit manner. From the circumstance that that method is not generally adopted in British practical works, readers may perhaps imagine an air of quackery in a work which, in every respect, is diametrically opposed to every form of pseudo-physic; and for ourselves, we are not insensible to the peculiar tendency in the medical mind, when once it heroically forswears all theory, and resolves on being purely practical, to lapse into a mere *routinière*, and jog along the easy path of recipe-vending, fancying

> Thinking is but an idle waste of thought,
> For nought is everything and everything is nought.

The contagious diseases are treated with extreme fullness and precision. We have much pleasure in selecting Dr. Thomson's remarks on the use of the cold affusion in scarlatina anginosa, because we conceive that it is a mode of treatment too much neglected. He observes:—"It abates the morbid heat of the surface, lessens the force and frequency of the pulse, allays the thirst, and, when re-action is promoted by the administration of a little warm wine on putting the patient into bed, it brings out a gentle breathing perspiration, and induces sleep of a calm and refreshing description. If the morbid heat returns, the affusion should be repeated. *It should be administered, however, only under the eye of the practitioner*, whose presence gives confidence, and calms the dread which mothers and nurses have of it as a formidable and apparently dangerous remedy. The patient should be taken out of bed, undressed, and placed in an empty tub; after which, two or three buckets of cold water should be poured over him. He should then be quickly dried with

warm towels, and, when he is replaced in bed, if the chilliness remain, a glassful of warm wine and water should be administered. In a short time sleep supervenes, and he awakes with feelings and an expression of countenance which indicate relief and comfort, rendered more delightful by the contrast of his feelings with what he previously experienced. The hotter the skin, and the higher the colour of the eruption, the more likely is the cold affusion to prove beneficial. I owe much of my success in the treatment of scarlatina anginosa to the affusion, whenever I could persuade parents or friends to permit its employment. When this cannot be effected, sponging with cold water may be substituted for the cold affusion. In using it, the patient should be stripped naked and placed in a tub, as already described, and large sponges, dipped in cold water, or vinegar and water, passed rapidly over the whole of the body. Neither the cold affusion, nor cold sponging, however, should be employed, if the patient have a great dread of them; or if the heat of the body be not above the natural standard, and not dry. Either may be employed at any period of the fever, provided the skin be hot or dry. It must be acknowledged, however, that the cold affusion is seldom applicable when the disease occurs in adults. It is in the young and sanguine that it proves truly serviceable."

Our author is full on the highly interesting subject of vaccinia. The recent observations of Mr. Ceely are detailed at large, and grounds adduced for believing, that the small-pox, when prevailing as an epidemic, has infected the system of the cow, and displayed itself in the form of cow-pox. In a note appended to this subject, we find the following:—"A German physician, of the name of Leihtenstein, observing the great similarity of the eruption caused by potassio-tartrate of antimony, inoculated with the fluid of the pustules, and obtained vesicles closely resembling those of vaccinia, from which he again inocculated. He states, that after inoculating and re-inoculating thirty-one persons with the above matter, he found them safe from the infection of small-pox when placed near others having that disease during an epidemic of small-pox." This, if it be true, is one of the most extraordinary circumstances that we know connected with the history of these eruptive diseases; for, in the first place, it seems at once apparently to controvert all idea of any specific poison of an animal character as influencing either of these affections; and, in the second place, we hold it to be a very curious coincidence, to say the least, between the analogical action of organic and inorganic causes in exciting the same form of diseased action. We are inclined to leave a tolerably broad margin here, yet we cannot but think, that it would be highly satisfactory, as well as interesting, to have the experiments herein referred to carefully repeated; they would even be valuable in a negative point of view.

Our editor observes, on the treatment of lupus—one of the most intractable affections which attack the tissues of skin—"Dr. Thomson (page 310) was extremely successful in temporarily, and sometimes even permanently, arresting its ravages. The writer has seen many cases treated by him, in which a speedy, manifest, and undoubted improvement followed the use of certain remedies. Local applications were sparingly used, but reliance was chiefly placed on three medicines, viz., iron, iodine, and arsenic, which were generally used at the same time. Mercury, in the form usually of biniodide, was also often given. Cod-liver oil was frequently used, and quinine and other tonics were occasionally employed." The following embraces the usual routine of practice adopted:—"When a patient first came under treatment, if the general health had been at all lowered, and if there were any anæmic symptoms, cod-liver oil and iron, especially the iodide, were given for ten or fourteen days: the diet being nutritious, and other means adopted to improve the tone of the system. Afterwards the alteratives were commenced. The biniodide of arsenic was given in doses of from 1-12th to 1-6th, or even 1-4th of a grain. In such large doses, however, it often produces gastrodynia; and when this has once occurred, the stomach is extremely intolerant afterwards of the smallest dose. Therefore, as the utility of the medicine can only be looked for after some considerable period, Dr. Thomson considered it safer to keep to the smaller doses, and to continue them regularly for a long time. If any gastrodynia came on, the medicine was at once left off, and opium and hydrocyanic acid administered. The cod-liver oil and the iron were sometimes continued with the biniodide. Conium was found useful if there were pain in the tubercles; and, even if not, appeared sometimes to have a good effect, so that it was frequently combined with the biniodide in the form of a pill. If the biniodide could not be borne in any form, the liquor arsenicalis of the London Pharmacopœia, in small doses of from four to eight minims, was given, and iodine rubbed in on the healthy skin with a view to absorption.

"Local caustic applications were very little used by Dr. Thomson. He sometimes employed the strong nitric acid to the edges of the ulcer, or nitrate of silver, in strong solution, (viz., from ʒij. to ʒiij. of the salt to ℥i. of water,) over the tubercles, and subsequently acid of lead wash to lessen the temporary heat and swelling which followed. In children the solution of the nitrate should be much weaker. When ulceration had occurred he used simple dressings: solution of nitrate of silver, or chlorinated soda being occasionally used. If unhealthy, pale, fungous granulations rose, an ointment of iodide of sulphur, or a very weak ointment of the biniodide of arsenic, or of either the iodides of mercury was employed. The quantity of the biniodide should not be above half a grain, or one grain to ʒi. of lard. There is, however, always a great risk of erysipelas, after the employment of powerful local applications."

We may here perhaps incidentally mention, that excision is recommended by Lebert, (*Traité Pratique*, p. 265,) especially when it can be made on healthy parts. We have also seen Dieffenbach practise it with success.

The history of elephantiasis, in its two forms, has been very graphically drawn by Dr. Parkes; indeed, we conceive the whole chapter to be a masterly piece of composition, and well worthy careful perusal. We are much pleased to observe a just encomium paid to the lucid narrative given nearly 2000 years ago by Aretæus. Nature is ever the same, and that however much doctrines and theories may yield to the fashion of the hour. But we have exceeded our usual limits; and it remains for us merely to state, in conclusion, that we consider the present work to be a very judicious and highly practical treatise on disease of the skin, without indulging in vague refinements which, by one bold sweep, are apt at times to carry away both the fancy of the reader and the wisdom of the writer. We recommend it to our practical brethren as a succinct and satisfactory compendium of cutaneous affections. The cases are most judiciously selected, and the whole volume replete with the highest practical interest.

De la Flamme à Petites Dimensions employées contre la Douleur, la Débilité, &c. Par Louis François Gondret, M.D. Paris. 2nd Edition. Pp. 255.

M. Gondret is one of those unfortunate men against whom, according to his own account, all the medical world conspire. His paste was so efficacious in the cure of cataract, that the surgeons and oculists of Paris, he tells us, were obliged to combine to force him from the field. In fact, they felt that the "craft was in danger"—that, unless some check was given to M. Gondret, no person would require an operation to free him from an opaque lens.

"Nothing is more easy," he says, "than by my method to cure incipient cataract, to stay the progress of the more advanced disease, and sometimes to re-establish the sight after unfortunate operations." *Credat Judeas!* He wails at once the injustice inflicted on himself, and the calamity which, as a consequence, falls on the sick.

The object of M. Gondret's present publication is, to advocate the application of heat to the skin, by means of a lighted *allumette* of wood or paper. The burning body is to be applied either so rapidly that no pain or injury shall be inflicted, or for a time just sufficient to cause pain, and leave behind an inflamed spot.

M. Gondret considers heat, thus applied, most efficacious in rheumatism, gout, and every variety of nervous disease.

Our readers, doubtless, have not forgotten Professor Day's excellent paper on the same subject, which appeared in these pages.

Gout; its Causes, Cure, and Prevention, by an Original and most Successful Treatment, founded on the Organic Changes in the Human Solids, and on the Functions of the Skin, without the Use of Colchicum. By Abraham Toulmin, M.D., M.R.C.S.E., Surgeon for nineteen years to the Tower Hamlets Dispensary, &c. Pp. 112. 1850.

This is one of a class of books we hold to be alike disgraceful to their authors, and degrading to the profession. Its title indicates its character.

Abraham Toulmin, M.D., M.R.C.S.E., nineteen years surgeon to the Tower Hamlets Dispensary, submits, he informs us in the preface, his worthless production to the *public*. Not content, however, with vaunting his own merits, he must needs cast obloquy on his profession, by insinuating that the practice of all others is to confine their "therapeutics to the use of drugs."

How able to be a teacher of others Abraham Toulmin, M.D., is, the following extract will testify:—

"Over the whole surface of the intestinal tube are to be seen (with the aid of the microscope) the open mouths of transparent vessels, called lacteals or milk vessels, which absorb or suck up, by capillary attraction, the chyle in its passage through the intestines."

Having assured the public, that other members of the profession have not paid that attention to the functions of the skin which their importance demands, he proceeds to inform his readers that the skin, "in every part, *gives egress and ingress* to exhalent and absorbent vessels," and that one function of the former is to excrete "pure carbon." Surely if Mr. Toulmin, as he here intimates, sweats diamonds, he need not tout for patients.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

ACCOUCHEMENT OF QUEEN ISABELLA.

The political journals have informed you of the accouchement of Queen Isabella, and its unfortunate termination. This untoward event has been the chief subject of conversation and comment in our medical circles, during the past weeks. The "Spanish marriages," in a political point of view, are a matter of deep interest to the French; but with this *we* have nothing to do. The medical question connected with the Queen of Spain's delivery is all that concerns us; and, from what has transpired, it would appear that "orthodox" obstetricity, as the Pope would have termed it, has made its *début* under very unfavourable auspices. The child, to use the Spanish phraseology, was "a robust Prince of the masculine gender," but, unacquainted as yet with the laws of politeness, he persisted in making his first appearance on the stage of life backwards—in other words, the case was a breech presentation. Turning became necessary. The operation was speedily and properly performed; but the child was still-born. Here the "orthodox" practice of the new Roman school, which I noticed in my last letter, unfortunately came into play. In any other country appropriate means for recalling the child to life would have been employed without a moment's delay. In Spain they manage things differently. Orthodoxy required that attention should be first directed to the child's soul—the body being left in the meantime to take care of itself. But the accident had not been foreseen, and consequently was not provided for. There was no "*eau de sécours*"—or, as we would call it, "blessed water"—at hand. Precious time was lost in seeking for the priest and his paraphernalia; and, after the ceremony of baptism, when remedies were applied, they were too late; life had fled. For three-quarters of an hour every effort of the medical attendants was made to excite respiration, but in vain; yet the child was perfectly sound in body, and the time employed in turning not very great. The conclusion drawn by our medical authorities here is, that the life of the infant Prince might have probably been saved, had not the prejudices of Papistry, in cases of this kind, rendered it imperative to baptize the patient before having recourse to any means for his restoration.

CHOLERA.

The political journals here have given extensive publicity to the short article on Cholera, which appeared in your last Number. I mention this merely to show the progress which has been made within the last few years in the rapid transmission of intelligence from one country to another. The article alluded to was copied into the *Patrie* for Saturday evening, though published in London on the previous day. Formerly it would have taken weeks to attract attention. I cannot find, on inquiry, that any cases of true cholera have been observed here lately, either in private or hospital practice. From the great heat of the weather, however, and the fruit season, we have an unusual number of cases of bowel complaint. Still it must not be forgotten that the disease is hanging about the confines, though not actually on the territory of France. Tunis is still subject to its ravages, and the recent outbreak at Malta has induced the authorities to revive the exploded system of quarantine for vessels arriving at Marseilles from that island. It had been generally understood that cholera was erased from the list of contagious diseases to which quarantine would be applied; but government has either changed its opinion, or fear has revived the practice. The health officers at Marseilles are, doubtless, rejoiced at the opportunity of exercising their functions, which had almost fallen into disuse.

According to letters received from the Andes, it would appear that the cholera was prevalent at Bogota, an elevation of 7800 feet; this is higher, by 6000 feet, than the point beyond which yellow fever has never passed in those countries.

LAW AGAINST THE PRESS.

The medical booksellers here are sadly down in the mouth since the passing of the law against the Press. It puts an end to the publication of works in parts, and will augment the price of the medical journals to an extent equally injurious to their circulation and the circumstances of their subscribers, which, as you can readily imagine, have not been much improved by the Revolution. Nothing of any importance has issued from the press for some time, and the barrenness is likely to continue. I observe, however, that Dr. Henry Bennet's work, on inflammation of the uterus, has been translated by an ex-interne, named Arran. There are fully as many "peeping Toms" here as on the other side of the water, and speculation of the fair sex quite as active; yet I cannot find that our ladies are subject to the universal degree of ulceration which corrodes the recesses of English society. According to Dr. Bennet, the London ladies are little better than "whitened sepulchres." Mr. Walker should apply his system of extramural interment to them.

SURGICAL INSTRUMENTS OF THE ANCIENTS.

One of the surgeons attached to the Roman expedition has published a short notice of some of the ancient surgical instruments discovered at Pompeii, and preserved in the celebrated Borbonico Museum. A few words on this subject may be interesting to your readers.

The ancients were perfectly well acquainted with the *speculum ani* and *speculum uteri*. The former was a double-branched instrument, something like a pair of scissors, with flat or rather valvular blades. The *speculum uteri* is a clumsy three-branched instrument, which was introduced with the branches closed; a screw traversing the centre at right angles to the axis served to separate the branches when introduced.

The number of scalpels preserved in the museum is immense; but it would seem that the greater part, if not all, were veterinary instruments. There are several handles of surgical scalpels; but the blades have been unfortunately destroyed by time.

Two bistouries, the only ones well preserved, are exactly similar to those in use at the present day; the backs, however, are rather thick, and the instruments do not shut.

The number of pincers also is very great, suited for every purpose, resembling exactly our dissecting forceps.

There are two lancets in an excellent state of preservation, one in silver, the other in bronze. The silver lancet is exactly similar in shape to the modern instrument, but a little larger. It is mounted on a round bronze handle. The second one is entirely bronze, both handle and blade, and is of small dimensions.

Two instruments for applying the actual cautery are worthy of notice; they were flat, semi-oval pieces of metal, fixed on bent handles, and near them were found metallic directors, which appeared to serve the purpose of guides when deep-seated parts were cauterized.

Among the smaller instruments may be enumerated stylettes of every shape, sharp-pointed, canulated, or ending in a blunt ball, like our probes; also various trocars, and straight or curved directors like those used for the operation for hernia.

The catheters and bougies are very curious,—adapted for male or female. Some are straight, others curved, some, finally S shaped,—an invention said to be modern, but which is at least 2000 years old.

The remnants of the apothecary art likewise abound, and are highly interesting:—several boxes, like our small medicine chests, full of remedies; twenty-five cases of bougies and spatulas; and 13 bronze cupping-glasses, exactly similar in shape to those of the present day but a little larger.

A more full description of this unique collection will probably be published, with plates, by M. Darenberg. Many a pretended invention or improvement may there be traced to its source.

THE ACADEMY OF SCIENCES.

A highly interesting report was read by M. Pouillet at the last meeting of the Academy of Sciences, on the Electro-physiological Researches of M. Raymond, of Berlin; but the importance of this subject induces me to reserve it for a future communication. Two long papers were also read. The first, by M. Honoré, was intended to combat the doctrines recently professed by Dr. Simpson, of Edinburgh, relative to turning in cases of distorted pelvis. When the superior orifice of the pelvis presents an opening not less than two and a half inches, Dr. Simpson, it would appear, recommends turning the child. M. Honoré prefers the forceps, because turning is almost always fatal to the child while it is dangerous to the mother. Besides, in cases where it becomes necessary to sacrifice the child altogether, the requisite operations are much more difficult when the lower extremities and trunk have passed first, the head being engaged in the superior strait of the pelvis.

IRELAND.

TREATMENT OF ANEURISM BY COMPRESSION.

The report of a case of aneurism lately treated in the London hospital by pressure, but in which it was ultimately necessary to tie the vessel, together with the clinical remarks of Mr. Adams, so calculated to prejudice the surgical world against this operation, has raised a storm of reclamation in Dublin, with a distinct challenge, after the manner of Mr. Syme, from the "medical press," that all the worse cases of popliteal ancurism, if forthwith duly forwarded and labelled to the Irish metropolis, shall be sent back cured! What with speculum challenges, and surgical challenges, we have of late got very pugnacious. It need scarcely be said, however, these Quixotic encounters lead to nothing. Fully aware, at the same time, of the great attention paid to this subject in Dublin, it cannot be for a moment considered, that the cases commented on by Mr. Adams would not have been better managed there. In the first place, the application of Signorini's tourniquet, the instrument used in London is attended with intolerable pain, and presses on the vein as well as on the artery—objections not at all applicable to the clamp, as described by Dr. Bellingham. In a second case, in London, it was stated the aneurismal tumour itself gave way. This could have only happened, perhaps, from the tourniquet pressing on some other parts besides the artery. A third in the chapter of accidents—"ulceration of the vein"—which occurred in a third case, also arose from injudicious and undue pressure, all which might be avoided by a careful use of any of the well known Dublin clamps, particularly the double one, for pressing on alternate points of the artery.

The subject is one of the very highest moment, and reflects much credit on the Dublin school. The plan is now established in surgery; and it would be unfair if any little *gaucherie* should deprive us of the benefits of such a manifest improvement on our older methods. Our northern friends give us credit for nothing original; this at least the Dublin school must claim.

TAPPING IN CHRONIC HYDROCEPHALUS.

Dr. Battersby has just published a Memoir on Chronic Hydrocephalus, in which he gives the *coup de grace* to the frightful operation of tapping, even in this form of the disease. It is scarcely necessary to go into his speculations as to the specific nature or pathology of the disease, which present little that is novel; his statistics however, are very formidable, and, notwithstanding the well-known figures on the opposite side by Dr. Conquest, and the impressions of the *British and Foreign Review*, (Vol. XII. p. 119,) he has arranged the result of about one hundred unsuccessful cases in opposition to seven successful. The operation has been performed in Dublin to his own knowledge, he says, ten times unsuccessfully; so that it is full time it were given up.

Battersby does not consider hydrocephalus a particular form of meningitis, as many practitioners do. From frequent examinations after death, he thinks the fluid is always found in the ventricles. The central white parts of the brain being completely broken down in congenital hydrocephalus, he says neither pressure nor puncture should be adopted. He has met with specimens of encysted hydrocephalus,—which are preserved in the Museum of the Dublin College: with Dr. Carte, however, he is inclined to look on them as an arrest of development in the cerebral matter; and, as such, of course to be treated in exactly an opposite manner from that suggested by the mere notion of inflammatory action. That there are at least four or five different shapes in which the latter shows itself, is, as incontrovertible as that there are nearly as many forms of the chronic variety of the disease. We have been too fond of bringing them all to one standard; in none, however, are we justified in puncturing the brain.

CURE OF PSORIASIS.

Sir Henry Marsh has drawn the attention of the profession recently to the use of sulphur in obstinate chronic cases of *psoriasis*. The curious symmetrical arrangement of the eruption in this disease, as previously noticed by authors, has also been dwelt upon by him at some length; pointing, perhaps better than anything else, to the fact of the affection being one of the numerous classes of blood diseases so ably dwelt on lately in the *Medical Times*. Psoriasis is quite familiar to the practitioner, from the excessive dryness of the eruption, absence of perceptible exudation, and, as a general rule, of heat or itching. Generally constitutional and hereditary, Sir H. Marsh's experience has led him to the impression that it is essentially connected with epistaxis and an alteration of the blood not very different from that so characteristic of the hæmorrhagic diathesis.

The treatment he has found of use, founded on this view of the matter, has been vapour sulphur-baths, the local application of "sulphur soap," and the internal use of sulphur in combination with sulphate of quinine. The disease is often very tedious, and requires much patience on the part of the practitioner; a steady adherence to this plan will, however, seldom fail in effecting a cure. In the higher classes of society a course of Harrowgate waters and sulphur-baths will prove of very eminent service, together with whatever combination of the mineral may be found most agreeable.

MERCURY A SPECIFIC IN PURPURA HÆMORRHAGICA.

Dr. Kingsley, of Roscrea, in his usual report of his hospital practice for the year, states the somewhat interesting fact, that he has found the speedy introduction of mercury into the system, in several cases of purpura, an invaluable remedy; the disease, he says, may be properly called "land scurvy," and he has hitherto found it treated on no very fixed principles. The disease is not an unusual one in Ireland, from the insufficiency and bad quality of the food of the poor; and he regards his plan as one of very great value in practice.

CHRONIC VESICO-VAGINAL FISTULÆ,

Another disease not uncommon in the country parts of Ireland, from the want of skill in the wretched creatures that profess to act as midwives,—Kingsley finds now more manageable, from a plan he has adopted,—that of applying to the parts the *caustic chloride of antimony*. Under the most scientific treatment, these cases are very unmanageable. The action of the antimony, however, is stated to be quite satisfactory. Its operation is purely mechanical, causing corrugation and lessening of the opening, a portion of the mucous membrane of the urethra or bladder, as the case may be, forcing itself into it, and forming a plug which prevents the constant dribbling from the bladder.

LIVERPOOL.

RE-APPEARANCE OF CHOLERA.

I notice from your last week's journal, that in London there have been two or three pure cases of Asiatic cholera. It appears from the nature of some expressions employed in

the report, that some have doubted the truth or possibility of such a disease re-appearing. In this town I have an opportunity of seeing almost every variety of medical cases; and among other epidemics, I must single out two for my present communication,—diarrhœa and Asiatic cholera. The first is very prevalent; if not checked early (and the ordinary astringents are seldom serviceable), it will terminate in pure Asiatic cholera. I have witnessed two deaths from the latter disease. The first patient lived three days; the second was in *articulo mortis* in less than seven hours, and died in less than fourteen. If true cholera cases (of which I have seen and heard of more than twenty cases within this last fortnight,) are seen early, and the discharges at once suppressed, they recover; but a few hours, as may be expected, makes a great difference, and the patients are irrecoverable from collapse. The old formula I have seen answer well in both diarrhœa and incipient stages of cholera, viz.:—chloric ether ʒij., tinct. of opium ʒiss., tinct. of muriate of iron ʒij., water ʒviij., mix a table-spoonful every half hour. The usual applications are of course to be conjoined. In my next report I probably may have a chance of furnishing you with more important particulars; but I hesitate not to say that the pure form of Asiatic cholera has re-appeared in this town, and, in all probability, it will be more severe; but, to judge from present appearances and the lateness of the season, it is possible that we shall not have it so prevalent as it was last year.

In conclusion, I wish to ask, whether the cholera discharges have been chemically analysed, and if so, what has been detected, and is there any marked difference in the analysis of discharges from the stomach and bowels?

YORKSHIRE.

GROSS MALPRACTICE BY AN UNQUALIFIED PRACTITIONER.

I hope to send you for next week the details of a case that has lately occurred in a considerable town of the West Riding; at present, I can only furnish you with a brief outline of that which seems to have caused a very great and painful sensation.

On Monday last occurred a *post-mortem* examination and inquest, upon the body of a woman who had died *undelivered* two days previous, (Saturday, the 27th.) Labour had commenced the day before; it was her ninth child; an unlicensed man attended. At one o'clock, on Saturday, he had found—he stated at the inquest—a face presentation; and that, after unsuccessfully trying to turn, he had left the patient. At four p.m., he sent for a medical man, who stated that he found the *arm* presenting, and that he told the unlicensed one to turn immediately; this he attempted, and, after a trial of about twenty minutes, failed to do. The surgeon then turned in three minutes and brought down one leg. Whereupon he also left, telling his colleague that "all was right, and that he would be able to deliver soon!" But not long after, this man also left—that is, about four o'clock p.m. At nine o'clock the woman *died undelivered, both these worthies being present.* At the *post-mortem* the uterus was found ruptured, and the head and body of the child in the pelvis. At the inquest, the surgeon who had been called in stated, that at four o'clock he discovered, after examination, that the uterus had been ruptured. Yet it appeared, that after he said that he had turned in three minutes, *he left the patient*, saying to the unqualified attendant, "All is right, you will be able to deliver soon." In fact, the whole of the scene at the inquest was one of discord and unseemly cross-examination between these two medicals. The verdict was to the effect, that death had been *caused by rupture of the uterus; but whether occasioned by the efforts of nature, or by maltreatment, there was not sufficient evidence to prove;* while the unqualified accoucheur was let off with censure, and the recommendation of the foreman, never again to practise any branch of the medical profession, for which he was clearly so ill qualified—a recommendation to which this person replied, "he considered himself fully qualified, and that he should continue to practise as heretofore." At present I can only give this report as a vague rumour; next week, however, you shall receive full particulars.

[We shall anxiously look for the county papers and our valued and truthful correspondent's promised letter. As appears from the above sketch, the surgeon called in was quite as much to blame as the unlicensed practitioner. Why did he leave the unfortunate woman, even for a moment, after he had effected, as he said he did, turning? Why, especially, if it was true, as he stated, that he knew at four o'clock, when first called in, that the uterus was ruptured. If his evidence had been straightforward, the other must, as he undoubtedly should, have been convicted. —Ed. *Medical Times.*]

GENERAL CORRESPONDENCE.

ST. MARY'S HOSPITAL.

[To the Editor of the Medical Times.]

Sir,—My attention has to-day been called for the first time to a letter, signed "Q-in-the-Corner," concerning the canvass for St. Mary's Hospital, in which an inquiry is made as to what so humble an individual as myself may have said in the Board-room of that Institution. As an Editorial note is appended to the said letter, I feel compelled, by the respect which I owe to the *Medical Times*, to put you in possession (in as few words as possible, so as not to occupy more of the valuable space of that learned periodical than I can avoid) of the purport of what I really did say; not for a moment flattering myself that any real importance can attach to the few unpremeditated remarks which I let fall on the occasion referred to.

I urged that it would be impossible that any three medical gentlemen, who remembered what was due to themselves, their profession, or the governors, could be prevailed upon to undertake an office in which they would have to sit in judgment upon the comparative claims of a number of their professional brethren, to whisper in the ears of nine governors all the tittle-tattle concerning them on which their estimate could alone be formed, and this without even the responsibility of a vote. That, supposing for an instant a court could be established, like that proposed, to apportion to each the exact position which he shall occupy among a number of men (all legally equally meritorious), it would require, at least, that those who sat upon such an inquisition, should be themselves so elevated by their professional *status*, as to be beyond all suspicion of professional rivalry or bias; and that such only as those named (Dr. Bright, Dr. Watson, and Sir Benjamin Brodie) could be said to have arrived at that enviable elevation. That three gentlemen had already been appointed on the Committee from whom emanated the report then under discussion, and that they were gentlemen so high-minded, so independent, and so jealously susceptible of the honour of the medical profession, that it would be impossible to replace them from the list of the governors with men possessing these qualities in a higher degree; yet that they, although they had votes (which it was proposed to deprive them of in the projected Committee), with all the strenuous zeal which it is certain such men must have exerted to the utmost when the characters of their absent medical brethren were at stake, were unable to prevent a clause from being inserted in the report, which deeply reflected on the gentlemen who had already become candidates, wherein it was said, that no man of any standing would become a candidate unless specially invited, when it was notorious that many gentlemen, highly distinguished in the profession, and in every way entitled to the highest respect from every member of it, and from the public at large, had already declared themselves candidates without any such special invitation. That some, if not all, of these three gentlemen had declared their fixed determination not to sit upon any such committee to execute the ignominious task assigned to them. I further argued, that no candidate who valued his professional character would consent that three medical men, A, B, and C, (as yet undecided who,) should play at ducks and drakes with his professional character; that each candidate might be willing that nine governors should select the medical men whom they most approved, in order to avoid a canvass, and no great injury would be done, or no peculiar sting would be felt by the individuals passed over, even if the very best candidates were not selected; but to give the

election the character of a *quasi*-medical investigation, would place unsuccessful candidates in a very equivocal position, and such as they could not afterwards protest against, if they once accepted the court; and even the successful candidates might not approve the exact position which such a court might assign to each. My other remarks had reference to the injustice which would be inflicted on those who came forward, openly and avowedly laying before the public their recommendations and claims, subject to every investigation, and even cavil, after repeated invitations from the governors; if others who, keeping their projects secret, should be able, through their private interest, to cause their names to be thrust prominently forward in the "Star-chamber" Committee, were thus allowed to steal a march upon their more open antagonists, or, if unsuccessful, could withdraw themselves as secretly as they made their advance. I pointed out that this was a very stale manœuvre, but its very flimsiness frequently threw well-meaning governors off their guard, and those who only commenced by indulging a little pardonable vanity, were frequently much chagrined, in the end, to find themselves made the instruments to perpetrate what has proved to be a flagrant job. My having thus tenderly lifted one corner of the veil which covered much dangerous material, must be expected to entitle me to some personal obloquy and misrepresentation; but you will see that I said not one word which should justify any one in attributing to me such language or such a sentiment as that there were only three men in the medical profession who could be trusted to give an "honest" opinion. I am glad to find that my reasoning could not be otherwise answered than by making such an attack—an attack which has been twice made, in even more gross terms, and twice repelled on the spot. I make allowance for warmth of feeling, and do not attribute even these eccentricities to dishonesty of purpose, but to that blindness which I know must prevail when party spirit gains any ascendancy, and which makes it so important that medical men should keep aloof when their brethren's claims are under discussion. I know two of the gentlemen who made these charges, and know them to be most honourable and upright men, who would be the last to advance any statement which they did not believe to be strictly true, still less would they desire vindictively to injure thereby one whom they could not confute by argument; but, notwithstanding all that, the statement which is endeavoured to be fastened upon me, in spite of reiterated denials, is as far remote from the truth as darkness is from light.

If there is anything really censurable in what I said, I do not shrink from the penalty; and with this feeling I have troubled you with this statement, utterly unworthy of your columns, challenged, however, as it has been, by the letter and the editorial comment.

I have the honour to remain, Sir, your obedient Servant,

James Newton Heale, Licentiate of the Royal College of Physicians, F.R.C.S., Physician to the Royal Free Hospital.

11, Westbourne-crescent, July 25, 1850.

[To the Editor of the Medical Times.]

Sir,—May I be allowed to express an humble dissent from the unqualified laudation which you bestow upon the report of the Special Committee of St. Mary's Hospital, regarding the election of the medical officers to the institution. In principle I may observe that I entirely agree with you, but I put a different construction upon the report; and, as I voted against it in a majority once, and the second time in a very small minority, I may be permitted to state my reasons for so doing,—the more so as I conceive, from the most unaccountable vacillation exhibited by the Governors on the occasion, that the greater number of voters only "followed suit."

Sir, I considered that the proposition of the Special Committee to appoint a committee of nine non-medical governors to decide the election of medical officers an insult to the whole profession; and, Sir, I consider it a further insult to permit that Lay Committee to consult three medical governors without giving these gentlemen a vote in a matter that they must understand better than their voting colleagues.

In voting against this proposition I conceived I was doing all I could to oppose the Committee; and on any occasion that I think the honour and dignity of the profession attacked I should act in a similar manner. I forbear to introduce personalities, otherwise I should wish to name one gentleman, a medical member of that Special Committee, who, almost alone, stood up to speak manfully in favour, not only of the rights of the profession at large, but of the medical governors of the Hospital in particular. One would indeed almost desire not to belong to a body of men who can quietly permit such indignities to be uttered by members of their own order and others, as have been heard in the board-room of St. Mary's Hospital, were it not for the strong consciousness that the medical profession, as a body, occupy a higher moral and intellectual standing than any other. But we have two great faults, one—in the eyes of the public—that there are no high places nor great emoluments to disguise and gild the drudgery of the doctor's career; the other, a real defect of character, that we do not possess that peculiar boldness necessary to constitute a good speaker, nor that habit of public speaking which alone can enable us properly and energetically to assert our rights vis-a-vis of lawyers and clergymen.

Why, Sir, with one solitary exception, and he must by this time have learned the danger of hasty expressions, all the medical governors of the hospital whose opinions I have heard, take the view I have expressed with regard to the mode of election now adopted, and, as a candidate myself and a medical governor, I can say that I would a great deal rather go before a purely medical committee, whose nomination or election would, indeed, be an honour, in the strict sense of the word, than before a lay committee; and I should think that I consulted the best interests of the institution, by voting for a purely medical committee, if I were not a candidate. One would think, Sir, that the governors were about to appoint medical men to offices with large salaries, comfortable sinecures, good berths for life, with coals, candles, and *et ceteras*. To judge by the manner in which they deport themselves, a stranger to the English system would scarcely imagine that hardworking men were canvassing for appointments which were to give them only more work and greater responsibilities, with a mere prospect of a remunerative contingency. The public will, ere long, find out that the system is bad; but I would rather that we worked out our own release, and did not wait for extraneous assistance.—I am, &c.,

July 21, 1850. M. D.

RE-APPEARANCE OF CHOLERA.

[To the Editor of the Medical Times.]

Sir,—In one of your leading articles of the 27th inst. you quoted from the Health Report of London for the previous week, the death of a gentleman, aged 63, of "malignant cholera" in eighteen hours, in Porchester-terrace, Bayswater, and that the drains were very offensive in that quarter, in support of your belief that the Asiatic cholera had again appeared in London.

I do not wish to question this opinion of yours, but I think that there are several circumstances connected with this case that may induce you to modify it, at least as regards the presence of "malignant cholera" in Porchester-terrace.

I had known the gentleman in question many years as a valetudinarian, and, therefore, I was not at all surprised to hear of his death suddenly from any attack of acute disease, much less from so lowering a complaint as cholera, whether English or Asiatic. But I also know very well the site of his house, and of the streets in the neighbourhood, and I think there can scarcely be found one more likely to engender malarious diseases in the metropolis.

The northern end of Porchester-terrace and the streets around are built over a valley, along which flows the stream, or rather drain, that does, or did, supply the Serpentine, as you may see by any map. The Great Western Railway station stands in the same valley, and is crossed by a bridge that connects the two sides of the valley with Paddington and the end of the Queen's-road, by means of a long causeway or terrace fully thirty feet above the natural soil. For the sake of uniformity of slope and level all the streets in the neighbourhood are adjusted to the level of this terrace, and hence the fronts of the houses are imbedded in the newly-raised banks, while their backs stand on the natural soil, which is alluvial. Having been a witness to the construction of these banks, I am at no loss to account for the offensive state of the drains that run through them, or for the unhealthiness of the houses built upon them; for, not only

street-sweepings, but all kinds of filth and refuse were used in their formation, the smell from which was often intolerable to the passers by; and it is only consistent with daily observation that houses built on such foundations should be unhealthy residences. One of the most violent and obstinate cases of ague I have witnessed near London, occurred in a boy employed in cleaning shoes, &c., in a damp back-kitchen similarly situated.

Bilious diarrhœa, attended with more or less sickness, has been very common lately in Kensington; but I have not heard of any case approaching to Asiatic cholera. In some instances the diarrhœa has run into dysentery, and has not been arrested by chalk mixture, with conf. arom. and tinct. opii, but has required large doses of plumbi diacet. with opium to control it.

In no case have I been able to trace its origin to the use of fruit and vegetables; indeed some of the parties rarely taste either; and several instances have been infants at the breast.—I am, &c.,

T. Ogier Ward, M.D.

Kensington, July 29.

[To the Editor of the Medical Times.]

Sir,—With regard to the existence of some of the worst cases of Asiatic cholera, irrespective of epidemic influences, so much canvassed at present in London, I beg to draw your attention to the facts I lately put together in the *Medical Times*, with respect to the 59th regiment in the Apollo troopship, on their way to China. We saw that fine regiment leave Ireland without a man sick,—the men, in fact, picked out for their general health,—and proceed to sea. When a week from shore, they were attacked by cholera in its worst possible form, the disease from the 18th of June to the end of that month, (when I believe they were only off Teneriffe,) and all through July up to the 11th of August, when they sighted the coast of South America, wearing one frightful shape, and cutting down the men with little distinction. Out of 512 men, no fewer than 320 were on the sick list; and Dr. Fraser, who kindly furnished us with the particulars, seems to have known true Asiatic cholera from a long acquaintance with it in the East. The vessel arriving off Rio Janeiro, you will recollect, and "the cholera still cutting down the troops, who crowded about the decks cheerless and spiritless; their eyes sunk in their sockets; their countenances pale and ghastly." They were disembarked on an island, lent for the purpose by the government of Brazil, when the cholera, as if by magic, at once disappeared. My impression at the time, from this single fact, was, that it was true Asiatic cholera from causes merely sporadic. I find I am considerably fortified in this view of the matter by the *United Service Journal*, which lately stated, that this vessel, returning to England again, has had again to disembark her troops—the peculiar sporadic affection this time taking the shape of dysentery. We have here, then, a demonstration of the point on the largest scale. The cholera at present in Malta is also quite in point. The occurrence of three cases of cholera last week, at St. Bartholomew's, did not require, perhaps, the epidemic (or, as we will call it, in contradistinction to sporadic, the *zymotic*) influence. We may, I take it, have all the worst symptoms without it; and, if so, what a heavy responsibility rests on our sanitary officers. If we estimate all the causes producing Asiatic cholera at 10, it makes all the difference in the world if we put the sporadic influence at 9, the epidemic at 1, or, as we, I fear, are too fond of doing, inverse the proportions. In the most remarkable book published on cholera this year, (a) I find the perfect analogy pointed out by Mr. B. Smith between the attacks of plague in London in 1603, 1625, 1636, and 1665, and the cholera in 1849; the diffusion of this epidemic influence, which I must confess I estimate at a very low figure, will depend on the reception the epidemic influence receives from the sporadic influence in all our large cities. Much unnecessary importance has been bestowed on the former. We have been analysing the spark, when we should have been removing the train which our modern Guy Fawkeses have been planting—our Smithfields and Bermondseys. We have been looking for some special miracle in our electrical and other atmospherical arrangements, when it is just possible these things were mere coincidences or consequences of the epidemic and sporadic influences acting on one another,—the latter by far the most essential source of even the worst kinds of cholera.—I am, &c.,

Kingsland-crescent, July 26, 1850. Charles Kidd.

(a) "Cholera and its Cure; a Historical Sketch." By J. S. Bushnan, M.D., &c. W. S. Orr and Co., Amen Corner. 1850.

DR. LIGHTFOOT'S PAPER ON PUERPERAL MANIA.

[To the Editor of the Medical Times.]

Sir,—I regret to be obliged to intrude any personal remarks relating to myself in your valuable journal, but I am compelled to do so to correct a slight misrepresentation in Dr. Lightfoot's valuable paper in your journal on the subject of "puerperal fever."

Although there can be no doubt this was quite unintentional on the part of Dr. Lightfoot, still I regret it the more, as I had hoped I had expressed myself sufficiently clear on this subject, when it was brought before the notice of the late Westminster Medical Society.

Dr. Lightfoot, in quoting the paper published in the last volume of the "Medico Chirurgical Transactions," asserts that I had described the disease as *contagious*, whereas, in the fourth conclusion I came to, I distinctly stated it was neither *contagious* nor *infectious*.

Secondly.—Dr. Lightfoot adds, that the description applies to an epidemic, though it is called in the paper *endemic*. It is very true that the statistics given extended only over three years. These were obtained only as a personal favour, the rest being kept secret; and which, although I saw them, could not be published without a breach of confidence.

Moreover, the Austrian Commission (if I recollect right) was appointed in 1844. At any rate the difference in the mortality of the two divisions, namely, that for midwives, and that for medical men, had persisted from the foundation of the hospital to a marked degree; and it was only after Dr. Semelweiss's chlorine ablutions were put in force that the mortality in the latter fell, for the first time, to that of the former.

Lastly, though these remarks were especially made with regard to Vienna, they were yet found to apply equally well to several other continental hospitals.

I trust, Sir, you will not consider these remarks have been made with any wish to disparage the value of Dr. Lightfoot's paper, but only in strict justice to myself.—I am, &c.,

19, Dorset-square. C. H. F. Routh, M.D.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

Sir,—Your reports of the meetings of the Royal Medical and Chirurgical Society so seldom require correction, that I trust you may find room for one upon this occasion. In your last number your reporter makes me observe, on a paper by Mr. Gabb, "That it was evidently a case of retention of urine." Now, what I did say was this:—"That if the title of the paper, *Retention of Urine in the Kidney for nine days*, (or, as I thought more likely, in the pelvis,) *was correct*, then I believed that the case was almost unique, as I concluded that it must have been caused by spasm of the ureter, as the calculus appeared to be too small to have impeded the flow of urine.—I am, &c.,

Charles Hawkins.

Savile-row, July 30, 1850.

CHLOROFORM AT ST. BARTHOLOMEW'S.

[To the Editor of the Medical Times.]

Sir,—Having heard your statement questioned, that anæsthetic agents have been administered at St. Bartholomew's Hospital in 7000 cases, I can assure you that you have rather under, than over stated the number. At the first introduction of sulphuric ether into this country as an anæsthetic agent, I gave it in several thousand cases for the extraction of teeth in St. Bartholomew's Hospital, besides in all the greater and lesser operations there performed. Then for a short period we gave chloric ether; and, on its introduction, chloroform. The last has been administered in every case requiring its use,—in amputations, lithotomy, sounding the bladder, reduction of dislocations, ligature, and other operations on nævi, and almost every operation in surgery,

including the extraction of several thousand teeth. It has been given in tetanus, in chorea, in delirium tremens, in cholera, and in many other diseases. The whole surgical staff of the hospital is of opinion, that it may be administered to almost any person, and at almost any age. I have myself administered it to patients from six weeks to almost eighty years of age; and the crowning fact, I think, is, that no patient has fallen a victim to its administration at St. Bartholomew's Hospital. If confidence in the use of chloroform has been for a moment shaken, let it be remembered that it has been administered 7000 times at one hospital, without a single fatal result.—I am, &c.,

S. J. Tracy,
Dentist to St. Bartholomew's and Christ's Hospitals.

25, Finsbury-place, July 28, 1850.

THE SELF-ACTING SPECULUM.

[To the Editor of the Medical Times.]

Sir,—Will you permit me to announce to your readers, that a most important improvement has just been made in the construction of the speculum? By the help of one or more small mirrors, ladies will now be able to speculumize themselves, and make all the necessary applications to the os uteri without the help of Dr. Peep-bo, or any of his confederates. When unemployed, they cannot do better than study the diseases going on within the dark and hidden recesses of their own frames. Whole days and nights might be usefully devoted to this praiseworthy species of self-examination.

Γνῶθι σε αὐτὸν is the motto which such matrons and virgins ought to adopt.—I am, &c.,

Lucus a non Lucendo.

July, 1850.

REPORTS OF SOCIETIES.

THE LONDON SOCIETY.

SELF-SUPPORTING DISPENSARIES.

A public meeting was held at the Hanover-square Rooms on Monday evening, the 29th ult., convened by the Council of the London Society, formed to promote the establishment of self-supporting dispensaries generally.

B. B. Cabbell, Esq., M.P., F.R.S., presided on the occasion, and on the platform we observed H. L. Smith, Esq., of Southam, Dr. Moore, Dr. Cormack, J. Bacot, Esq., J. Propert, Esq., the Rev. Mr. Laing, S. Gregson, Esq., Dr. Justice, the Rev. W. Owen, &c. There was a good attendance of members of the profession and others, and the proceedings appeared to excite great interest.

Letters were read from the Earl Spencer, Sir John Forbes, Dr. Webster, J. Jones, Esq., of Derby, Caleb Williams, Esq., of York, C. Bray, Esq., Coventry, Robert Thornvill, Esq., Burton-on-Trent, the Rev. John Morris, Stratford-on-Avon, and others.

The Chairman briefly stated the business of the meeting, and called on the secretary. T. D. Hawker, Esq., the secretary, read a Report of the Council of the Society, which stated that they had fully considered the objections raised to the scheme, and were convinced that they could not be supported, that they were in fact groundless. It had been pleaded that self-supporting dispensaries might be injurious to the private practice of the profession, but the Council would undertake to assure them that they would have no such effect, as they would be open only to persons who were willing to contribute within their means, but were unable to pay the usual charges for medical attendance, and who had an objection to apply for charitable relief. By weekly contributions, of about one per cent. on their earnings, the working-classes, who would otherwise have to seek charitable relief, or linger in unalleviated illness, would be entitled to medical assistance whenever attacked by indisposition. The subscriptions were to be regulated by the rate of wages received to a fixed limit, beyond which parties could not be allowed to enter as members. With regard to the returns, Mr. Smith had stated that a subscription of one penny per week from each of 100 persons, producing an income of 21*l.* 13s. 4d. per annum, would be amply sufficient to pay for medical advice of the highest class. The facilities offered for obtaining prompt assistance would tend to ward off more serious attacks of illness. There could be no doubt that these dispensaries would do much to relieve hospitals from unsuitable applicants, and correct the abuse of the resort to public hospitals, infirmaries, &c.; relieve the Poor-rates; and promote habits of providence among the working-classes. The London Society now proposed that a number of these self-supporting dispensaries should be established, and that every medical man of the district should be allowed to join them as he might please, leaving the patients to decide by whom they would be attended during their illness. It was believed that this system would be beneficial both to the people and to the medical profession. In a recent work, by Dr. Stewart, it is stated, "that two-thirds of those applying for relief to hospitals and dispensaries are able to pay something for medicines and attendance." The Report concluded by calling on the medical profession and the public to aid the Council in their endeavours to establish these dispensaries wherever called for or practicable.

Dr. Cormack, of Putney, would propose, that the Report now read be received, and entered on the minutes. He acknowledged with much pleasure, that the Report had fully removed all the objections in his mind to the general introduction of Mr. Smith's plan. He believed that, not only would the profession be advantaged, and the labouring-classes be much benefited by the establishment of self-supporting dispensaries, but that the London Society, while engaged in promoting the good work, would prove a valuable rallying point to the profession, from which the most satisfactory results must arise.

J. Propert, Esq., in seconding the motion for the adoption of the Report, warmly advocated the plan and objects of the Society. It gratified him much to state, that, though he had formerly been opposed to the establishment of these dispensaries, as theoretically objectionable, he was now, from the undoubted evidence afforded of their highly-beneficial effects, their warm advocate and supporter. He conscientiously believed, that the system would lead to the best results; and he would, to the utmost of his ability, contribute his assistance in the furtherance of the objects of the Society.

The Rev. David Laing, M.A., then rose and proposed the first resolution, to the effect, "That these dispensaries were well-calculated to secure for the working-classes adequate medical assistance at a cost within their means, and to promote amongst them habits of frugality, forethought, and independence." The rev. gentleman addressed the meeting at some length, and advocated the objects of the Society in a most able and eloquent appeal. He said it was vain and useless to seek out degradation and distress unless some remedy were at hand. His experience had assured him that, however forlorn and miserably depressed, there was still in the hearts and understandings of the poor and lowly the susceptibilities of moral and independent feeling; and he had found that, with the improvement of their physical comforts and moral feelings, he could successfully work upon the mind for higher purposes. He instanced the good effects of the Self-supporting Dispensary at Camden Town, recently established by the assistance of Mr. Smith, who came up from Southam for that purpose. A feeling of independence of charity had sprung up; and he firmly believed, that the cordial support of the profession in aid of Mr. Smith's plan would have the very best effects upon the moral, social, and physical condition of the labouring-classes.

Dr. Moore, of Savile-row, in seconding the resolution, observed, that having very carefully examined the bearing of the objects proposed by the London Society, and the ends and aims to be secured by adopting Mr. Smith's plan, he was convinced, that a more admirable remedy for the evils admitted by all professional men to exist under the present system could not be devised. He candidly confessed, that he was a strong opponent of the old dispensary system, which had injured deeply the profession, and demoralised the people to a great extent. He would therefore tender his cordial support to the resolution proposed by the rev. gentleman, and at all times, in his proper place, would, to the utmost of his power, aid in promoting the operations of the London Society.

H. L. Smith, Esq., of Southam, who was received with general applause, then addressed the meeting at some length.

Want of room will prevent our giving more than a very brief report of his clear and convincing arguments in elucidation of the advantages of the self-supporting system. These dispensaries, he observed, were undoubtedly founded on theory, but twenty-five years' experience had afforded practical results of a most satisfactory character, and he must be allowed to state that, in no instance, when fairly tried, had his plan failed. All the objections hitherto urged against the adoption of his system, had been founded in misconceptions of his views and principles. Societies had been formed in certain places, and called self-supporting dispensaries, but they turned out to be merely medical clubs, and their failure in many cases was not to be wondered at. Mr. Smith proceeded to answer all the objections he knew of which had been urged against the establishment of these dispensaries. In reference to one remark,—"that the poor would not be brought to subscribe,"—he would say, of course not, if you continue to *force* your *charity* upon them. But, besides the successful establishments in Coventry, Burton-on-Trent, Derby, and other places, he would tell them that only a fortnight since he witnessed the paying of 10*l.* in *pence*, at Northampton, as the *weekly* subscription of the members of the Self-supporting Dispensary in that town. He would also allude to another feature which had been urged in opposition. It was said his plan would injure the private practice of the profession. *In every instance it was the reverse.* Professional interests were promoted and professional feeling and character upheld, society gratified, and the people benefited. Before concluding, he must observe, that whilst his system was applicable to England, Wales, and Scotland, it was peculiarly adapted, he had ascertained by a recent visit, to the poor of unhappy Ireland. In addition to all other evils, the labouring classes of that country would soon have to endure the evils of neglected health. The ruined state of its medical charities must realise the worst anticipations; and this system alone could obviate the misery threatened. He trusted that it would be applied there. Indeed he had that week been in communication with Sir W. Somerville on the subject. Thanking the meeting warmly for the hearing it had given him, Mr. Smith sat down amidst loud plaudits.

Mr. Becke, who had come up from Northampton to be present at the meeting, entered at some length into the subject, and bore the strongest testimony to the excellent effects produced by the operations of the Self-supporting Dispensary established in that town, both as regarded the interests of the profession and the condition and comforts of the labouring classes. This gentleman's address excited much interest, and afforded ample evidence of the moral value and thorough efficiency of the self-supporting system.

J. Bacot, Esq., of Portugal-street, then offered some observations in support of the Society's objects. He had enlisted in the cause, from a thorough conviction that it was in every respect worthy of the patronage of all who had the character of the profession and the welfare of the labouring-classes at heart. The independent labourers were the pride and the stay of the country; and he considered Mr. Smith's plan as a great political engine, to improve and regenerate the people.

Samuel Gregson, Esq., Chairman of the Committee of the Self-Supporting Dispensary, Charlotte-street, said: Although not a professional man, he had great pleasure in supporting the proceedings of the meeting. He had long observed the decline of the feeling of *self-reliance* among the working-classes, especially in sickness and adversity. He believed that the self-supporting dispensaries would go far to redeem them from much of that recklessness and despondency which had such evil effects upon their moral and physical condition.

The resolution was then put by the Chairman and carried unanimously.

The Rev. W. Owen, of Islington, proposed the thanks of the meeting to H. L. Smith, Esq., for his disinterested and untiring exertions in the cause of humanity. He could not help remarking, that whilst statesmen and warriors were rewarded whilst living, and honoured when dead, it but too often occurred that the benefactor of his race, in the ranks of the medical profession, sank into the tomb unremembered and forgotten. Mr. Smith's name would, however, be inscribed in the grateful memories of thousands of his fellow-countrymen.

J. Bompas, Esq., of Camberwell, B.M., would warmly second the resolution. He looked forward with hope and confidence to the general adoption of Mr. Smith's plan.

H. L. Smith, Esq., emphatically thanked all present for the compliment they had paid him. It would encourage him, if encouragement were wanted, to proceed in his onward course. He should ever have at heart, he trusted, the good of his fellow creatures; and he was sure, that if we taught them to love the brotherhood, they would also "Fear God and honour the Queen."

The Rev. David Laing moved the thanks of the meeting to the Chairman, for his kind and able conduct in the chair, which was seconded by J. Propert, Esq., who observed, that were he called upon to thank that gentleman every time he appeared before the public in the cause of benevolence and goodwill, he might safely say his time would be wholly occupied.

EPIDEMIOLOGICAL SOCIETY.

A general meeting of the friends of this Society was convened on Tuesday evening, at the Hanover-square Rooms. Lord Ashley presided, and the meeting was numerously and respectably attended, both by members of the profession and other gentlemen.

The Right Hon. Chairman opened the proceedings with his accustomed eloquence, stating that of late the ravages of epidemic diseases in the metropolis had been most appalling, and that, although no epidemic was at present existing, we were even now threatened with a more fearful visitant than the epidemics of common occurrence, these alone carrying off 12,000 victims annually. He looked at the establishment of this Society as particularly adapted to the present times. He described the times as tending to an aggregation of large masses of the people. The advancement of science, and its application to the useful arts, required a division of labour calculated to this end; and the business of the Society would be to ascertain how this aggregation of masses can take place innocuously. It has hitherto been destructive both to the physical and moral well-being of the poor. The object of the Society is to exalt the poor, to raise them out of the mire, and thus to confer a great and lasting benefit on the human race. It was no mere question of theory or taste: it was a search for truth, and an effort to apply that truth, when discovered, for the permanent benefit of mankind. A very large proportion of the pauperism of these realms appeared to result from deficient sanitary arrangements. Bad drainage, bad ventilation, bad water, over-crowding, and filth, tended to propagate disease, and to produce fatal results. These, in their train, left widows and orphans; and habits of intoxication were produced by the disgusting state of the habitations of the poor. Much of this might be remedied by sanitary appliances. The objects contemplated by this Society had, therefore, a social and moral bearing, which, under the blessing of God, might effect lasting benefit on the human race.

The following resolutions were then proposed and carried unanimously, viz.:—

1. Moved by Dr. Babington, seconded by Dr. Addison, "That a Society be forthwith established for the investigation of epidemic diseases, to be called the 'Epidemiological Society,' and that all gentlemen interested in its objects shall be eligible as members."

2. Moved by Dr. Golding Bird, seconded by John Propert, Esq., "That the Society shall be governed by a president, vice-presidents, council, and other officers."

3. Moved by R. D. Grainger, Esq., seconded by Dr. Sibson, "That Dr. Babington be requested to accept the office of president."

4. Moved by Charles Hawkins, Esq., seconded by William Rogers, Esq., "That the following gentlemen be requested to act as vice-presidents, viz.:—Dr. Addison, Dr. Bright, Sir B. C. Brodie, Sir W. Burnett, Sir C. M. Clarke, the Rev. T. Dale, Mr. R. D. Grainger, Sir C. Hastings, Dr. Haviland, Regius Professor of Physic, Cambridge; Sir J. M'Grigor, Mr. J. Nussey, Mr. J. Propert, Dr. Roupell, Dr. Smith, Colonel Sykes, and Dr. Watson."

5. Moved by Dr. Roupell, seconded by C. B. Lord, Esq., "That the following gentlemen do constitute the council, viz.:—Mr. Bell, Dr. J. Bird, Dr. G. Bird, Dr. Bryson, R.N.; Mr. Busk, Dr. Carpenter, Mr. Greenhalgh, Dr. Gull, Mr. Headland, Dr. Helsham, Mr. Hunt, Dr. Jenner, Dr.

Latham, Dr. Leeson, Dr. M'William. Mr. Marson, Dr. Parkes, Mr. Percivall, Dr. Seaton, Dr. Sibson, Dr. Sieveking, Mr. Simon, Dr. Snow, and Mr. Walsh."

Dr. Babington said, that he was anxious to correct an impression which had appeared in the medical Press, that he was the founder of the Society, whereas it originated solely with Mr. Tucker.

The speakers generally appeared very sanguine as to the success of the Society, which has certainly been set on foot under most favourable auspices.

BRITISH MEDICAL FUND.

A large meeting of the members of this Society was held at the Freemasons' Tavern, on the 31st ult. Among those present were W. Bainbridge, Esq.; J. R. Bennett, M.D.; C. M. Burnett, M.D.; James Bird, Esq.; J. Bushnan, M.D.; S. Brougham, Esq.; C. H. Clarke, M.D., (Bath); T. B. Curling, Esq.; R. Dunn, Esq.; E. Daniell, Esq.; Dr. Elliot; J. Forbes, M.D.; H. Hancock, Esq.; E. Headland, Esq.; C. F. Lord, Esq.; T. L. Matthews, Esq.; S. W. J. Merriman, M.D.; T. Nicholson, Esq.; J. Propert, Esq.; Dr. Sieveking; G. J. Squibb, Esq.; J. Spurgin, M.D.; H. L. Smith, Esq., (Southam); C. Smith, Esq., (Highworth); W. Self, Esq.; T. O. Ward, M.D., &c. &c. &c.

Dr. Forbes having briefly addressed the meeting, the Secretary read the Report, containing statements of the proceedings of the Society since the meeting in March. It appeared the Rules had been duly enrolled, and were now offered to the acceptance of the meeting. The rules were not read, as they were of some length; but it was stated, that each member would receive a copy in the course of a few days, and any alterations that might be thought necessary, might be done at any future period, under the provisions of the Act of Parliament. It being requisite that directors should be forthwith appointed, the Committee of Management, considering that the interests of the Society would be best promoted by being under the direction of those who were best acquainted with its mechanism, offered themselves as directors for the first year. It being thought probable that some time might elapse before the Provident Branch could pay its own expenses, it was proposed that any deficiency might for the time (at the discretion of the Directors) be met by the money arising from annual subscriptions. The subscriptions were reported to amount to 220*l.* 8s. 9d. A short period having elapsed since the Committee had been empowered to receive payments in respect of membership, this circumstance was considered highly satisfactory; indeed, the assurances of support, received both in the metropolis and the provinces, had been very numerous; and, as far as the Committee could gather, the plan of the Society had been almost unanimously adopted by the profession. In conclusion, the Committee congratulated the members on the encouraging state of the Society, which they were confident would prove one of the most important ever carried on by the medical profession, and one fraught with benefit to every member, and those nearest and dearest to him. A statement of the Society's finances having been read, R. Dunn, Esq., proposed, and S. W. J. Merriman, M.D., seconded the resolution :—

"That the Report made by the Managing Committee be received and approved."

Carried unanimously.

Dr. Elliot, in a very able speech, proposed :—

"That the rules now given in by the Committee of Management be received and adopted as the rules of the Society, and that the same be printed for the use of the members."

W. Self, Esq., seconded the resolution, which was carried unanimously.

Dr. Burnett, after dwelling upon the services of the Committee, proposed :—

"That the following gentlemen, being members of the Managing Committtee, be appointed Directors for the ensuing year :—Dr. B. G. Babington, Dr. J. R. Bennett, Mr. J. Bird, Mr. T. B. Curling, Mr. E. Daniell, Dr. J. Forbes, Mr. H. Hancock, Mr. E. Headland, Mr. J. Propert, Dr. J. Spurgin, Mr. G. J. Squibb, Dr. G. Webster."

The trustees, auditors, and arbitrators, were then appointed.

The Secretary having left the room, after a few remarks from Dr. Forbes and J. Propert, Esq., Dr. C. H. Clarke (of Bath) proposed, and H. L. Smith, Esq., (Southam,) seconded the resolution.

"That Dr. Forbes be requested to convey to Mr. Hawlayne, on the part of the meeting, their unanimous sense of his great zeal, assiduity and most important labours in the formation of the Society."

Carried unanimously.

C. F. Lord, Esq., then proposed :—

"That the thanks of the meeting be given to the late Managing Committee for their exertions in behalf of the Society."

R. Dunn, Esq., seconded the resolution, which was carried unanimously.

After a vote of thanks, carried by acclamation to Dr. Forbes, for his very able, courteous, and gentlemanly conduct in the chair, the proceedings terminated.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, July 26.

Chaldecott, Thomas Andrews, Montagu-place, Russell-square.
Cockcroft, William, Colne, Lancashire.
Cox, John Anderson, Hon. East India Company's Service.
Davis, Edward William Stephen, Merthyr Tydvil, Glamorganshire.
Kitching, Alfred, Hull.
Lobb, Harry William, Aldersgate-street.
Martin, Frederick, Clare, Suffolk.
Newnham, Christopher Atkinson, Farnham, Surrey.
Rowley, Charles Octavius, Barnsley, Yorkshire.
Willams, George Gordon Lawrence, Llandovery, South Wales.

Tuesday, July 30.

Beaumont, Joseph Wilson, Sheffield.
Bourne, Walter, Dublin.
Brown, Thomas, Newcastle-upon-Tyne.
Everet, Thomas Denny, Stepney-green.
Fitzgibbon, Richard Edward, Killeagh, County Cork.
Marriott, John, Kebworth, Leicestershire.
Rhodes, George Samuel, Earlsheaton, near Dewsbury, Yorkshire.
Scowcroft, James Parkinson, Bolton-le-Moors.

University and King's College, Aberdeen.—The degree of M.D. was conferred on the following gentlemen, who had been previously examined on the different branches of medical science, and found duly qualified, July 26, 1850 :—Henry William Jones, Calcutta; Charles Gordon, Aberdeenshire; David Scott, Kincardineshire; Owen William George, Pembrokeshire; John Davies, Hertford; William Ward, Huntingdon; Thomas Porter, Bishopsgate-street, London; John Gordon Bailey, Pentonville; Henry Strangways Hounsill, Bridport; Charles Joseph Bullock, Congleton; George Kitching, Enfield; Abraham Kidd, Ballymena; Josiah Roberts Jenkins, Denbighshire; Thomas Edward Rawson, Liverpool; William Thompson, Cumberland; Joseph Henderson, County Tyrone: Augustus Prater, Woolwich; Felix William Lyon, Kingston; Thomas Walker Grant, Connaught-terrace, London; Frederic Bateman, Norwich; George Thompson Gream, Hertford-street, London.

Obituary.—On the 19th inst., John Pritchard, Esq., surgeon, of Great Yarmouth. Lately at Malta, of cholera, Dr. Gray, of the 44th regiment. On the 25th inst., at Hampstead, Middlesex, aged 73, Thomas Davis, Esq., surgeon. At the Presidency, Bombay, Dr. Larkworthy, of cholera. On the 30th inst., John Miles, Esq., surgeon, of 78, Gracechurch-street.

Charing-cross Hospital Medical School, West Strand.—The annual distribution of prizes and testimonials of honour to the students most distinguished for their acquirements in the various branches of medical study at this Institution took place on Friday, July 26, 1850, the Right Honourable the Lord Robert Grosvenor in the chair. The following gentlemen were the successful competitors :—Chemistry—Silver medal, Mr. Thomas Boor Crosby, Gosberton,

Lincolnshire. Certificate, Mr. T. W. J. Goldsboro, Welchpool. Materia Medica—Silver medal, Mr. Thomas B. Crosby. Anatomy (Senior)—Silver medal, Mr. John C. Savery, Hastings. Anatomy (Junior)—Bronze medal, Mr. T. B. Crosby. Certificate, Mr. Goldsboro. Midwifery (Senior)—Silver medal, Mr. T. C. Savery. Certificate, Mr. James M'Cann, Parliament-street. Midwifery (Junior)—Bronze medal, Mr. David T. Morris, Caermarthen, South Wales. Certificate, Mr. John Williams, Cardiff. Physiology (Senior)—Silver medal, Mr. T. C. Savery, Hastings. Physiology (Junior)—Bronze medal, Mr. T. B. Crosby. Certificate, Mr. Goldsboro. Medicine (Senior)—Silver medal, Mr. T. C. Savery. Medicine (Junior)—Bronze medal, Mr. John Williams. Book and Certificate, Mr. D. T. Morris. Book—Mr. H. B. Lingham, Tulse-hill, Brixton. Surgery (Senior)—Silver medal, Mr. D. T. Morris. Book—Mr. John Williams. Surgery (Junior)—Bronze medal, Mr. Harry B. Lingham. Book, Mr. E. T. Lampriere, St. Olave's, Bermondsey. Botany (1850)—Silver medal, Mr. John Williams. Certificate, Mr. T. B. Crosby. Botany (1849)—Silver medal, Mr. Leicester Atkinson, Colchester. Book, Mr. Henry B. Lingham. Certificate, Mr. James Willes, Pentonville. Medical Jurisprudence—Silver medal, Mr. D. T. Morris. Book and Certificate, Mr. John Williams. Certificate, Mr. Charles Rickets, South Lambeth. General Professional Acquirements—Gold medal, Mr. T. C. Savery. Diligence and good conduct—Honorary testimonials, Mr. H. B. Lingham. Governors' Clinical Prize—Silver medal, Mr. John Williams and Mr. D. T. Morris.

Cholera.—This disease is devastating the capital of Mexico, Vera Cruz, and St. Luis Potosi. The cases at the Havana are few in number. The disease still exists in Malta; cases are comparatively few; but the mortality is great. The men and women belonging to the 44th Regiment still suffer, and, unfortunately, not one attacked has recovered. In the fleet, which is kept cruising off the coast, communication with the shore being had by boats, the mortality is slight; only 14 deaths having occurred out of 300 cases. A later report states the disease to be much on the increase in the island, especially in the 44th Regiment. The assistant-surgeon of the Medina has been attacked, and sent to hospital, and Dr. Grey, of the 44th, is dead of the disease. The regiment has since been removed to the isle of Gozo, but the pestilence broke out there, and several men were dying, when the report left. Its presence in the French African Colonies has been denied. Letters from Bogota state that lime-juice has proved very successful in the treatment of this disease; and it is added, that few who resorted to the remedy in time died. Some took the juice of ten or a dozen limes pure; others made lemonade with the same quantity of juice, using very little sugar or water. Citric acid has also been used with advantage, as a substitute for lime-juice. At Ambalena, and at many of the poor villages on the banks of the Magdelena, especially where much fish is eaten, lime-juice is said to have produced beneficial effects.

Legal Medicine.—We are glad to learn that it is the intention of M. Gaultier de Claubry to publish in a separate form and English dress the valuable treatise upon "Chimie Légale," which he contributed to the fourth edition of Briand's "Manual Complet de Médécine Légale." A gentleman every way competent to the task is engaged in the preparation of the translation under the immediate inspection of the author, who contemplates making numerous additions, so as to maintain his work in exact accordance with the present state of chemical science.

The Fellowship of the College of Surgeons.—A Fellow of this College by election, and lately a surgeon to a London hospital, has quitted the profession, and commenced trading, having taken out a patent for a new method of silvering glass. Some years ago a member's name was struck out of the college list for trading, he having invented a new ink, by the sale of which he is understood to have profited greatly. Will the College authorities mete out an equal measure of justice or injustice, we care not which, to the trading Fellow, as to the trading member? We have heard that this gentleman is not the only Fellow of the College engaged in trade.

Ligature of the Internal Carotid, when Wounded though the Mouth.—(From Mr. Guthrie's Lectures, reported by Mr. Foote.)—When the internal carotid artery has been wounded through the mouth, what operation is requisite to arrest the hæmorrhage? A ligature must be placed above and below the wound in the vessel. After much consideration and many trials, the following operation is recommended to the attention of those best acquainted with the subject:—An incision is to be commenced opposite to, and on the outside of, the extremity of the lobe of the car, and carried downwards in a straight line, until it reaches a little below the angle of the jaw, at the distance of about half an inch, more or less, as may be found most convenient from the form of the neck. This incision exposes the parotid gland without injuring it. A second is then to be made from the termination of the first, extending at a right angle forwards, under or along the base of the lower jaw, until the end of it is opposite the first molar tooth. This incision should divide the skin, superficial fascia, platysma myoides muscle, and the facial artery and vein. The second molar tooth should then be extracted, and the jaw divided at that part. The deep fascia, the mylo-hyoideus muscle, and the mucous membrane of the floor of the mouth are next to be cut through, the insertion of the internal pterygoid muscle being exposed and divided. The surgeon will then be able to raise and partially evert the angle of the jaw, thus obtaining room for the performance of the remaining part of the operation, which should be effected by the blunt end of a scalpel, or by some other instrument, chosen for the purpose of separating, but not of cutting the parts. The styloid process of the temporal bone may next be readily felt and exposed by the separation of a little cellular membrane, and with it the stylo-hyoid muscle, which is to be carefully raised and divided. When that has been done, the external carotid artery will be brought into view, together with the stylo-pharyngeus muscle, and the glosso-pharyngeal nerve attached to it. These are to be drawn inwards by a blunt hook, when, if care be taken to avoid the pneumogastric nerve, the internal carotid may be felt, seen, and secured by ligature with comparative facility outside the tonsil, there being between them the superior constrictor of the pharynx, which, in a case of such a wound through the mouth, must have been divided. The pneumogastric nerve should be drawn outwards, and the external carotid artery also, if in the way. The section of the jaw will not, in all probability, lead to future inconvenience; the bone always reunites, when divided, with little difficulty. That this operation requires a thorough knowledge of the anatomy of the parts is true, and this can only be acquired by dissection. I have never performed it on the living body; but Mr. Hancock and I have bestowed great pains in the dissecting-rooms of the Charing-cross Hospital, in ascertaining what appeared to be the easiest mode of doing it on the dead. The parts have been frequently dissected at the College of Surgeons also, for the same purpose, by the assistant-conservator and the students in anatomy. The examinations for the fellowship will end on Wednesday, the 7th of this month; and either Mr. Quekett or Mr. Skinner will, with the permission of the president, readily show the preparations, and demonstrate the parts to any gentleman who may desire to see them, on Friday, the 9th, at two p.m.; they can be referred to by any one, at any time afterwards, who may be suddenly called upon to make himself more particularly acquainted with them.

A Treasury Order authorizes the general admission of iodine at an *ad valorem* duty of 10 per cent.

Naval Appointments.—Assistant-surgeons (Acting) Philip Wm. Govett (1850) and Samuel Denny, M.D., to the Impregnable, 104, flag-ship at Devonport, and T. J. Haran to the Victory, 101, flag-ship at Portsmouth.

At a special general meeting of the Governors of the Norfolk and Norwich Hospital, Dr. Ranking was elected physician by a majority of 128. The numbers were:—Dr. Ranking, 364; Dr. Copeman, 236.

Distributing Quack Bills.—At the Wolverhampton police-court, John Clogherty was charged, on the 18th instant, with distributing indecent bills, which is an offence against one of the Corporation bye-laws. The bills were recommendatory of some quack "medical adviser" at Birmingham. On the defendant's promising not to distribute any more such bills, he was discharged. The bills found upon him were ordered to be destroyed. It would be well if such a bye-law were general.

Sanitary Condition of Yarmouth.—In Mr. Lee's report on Yarmouth, under the Public Health Act, it is stated, with regard to disease and mortality, taking the *inevitable* annual mortality to be 11 in 1000, and the *actual* mortality of Yarmouth being 22 4-10ths in 1000, the *preventible*

mortality will be 11 4-10ths in 1000. Yarmouth, with respect to its sanitary state, is very low in the scale. Mr. Lee is of opinion that more persons died of cholera last year than were reported. Mr. Cufande admitted, that not one in ten of the cases was returned, from the fear that persons would be prevented visiting Yarmouth during the season for watering-places, if a true account were furnished. The drainage is very bad; there are no public water-works, the inhabitants being dependent on rain and well-water, the latter polluted with decayed animal and vegetable refuse, and containing one-eighth of an ounce of earthy matter to the gallon in addition, the softest water having upwards of thirty-two degrees of hardness.

HEALTH OF LONDON DURING THE WEEK.

This return, in connexion with the two previous, indicates a continuous increase in the mortality of the Metropolitan districts. The deaths which, in the two preceding weeks, were successively 781, 863, rose last week to 898. In the corresponding weeks of nine years (1840-8) the lowest number occurred in 1843, and was 749; the highest in 1848, when it was 1201; but last year in the same week the deaths rose to 1931, when pestilence rapidly multiplied its victims. The average of the corresponding weeks of ten years (1840-9) is 1022, which, with a correction for increase of population, becomes 1115. The 898 deaths of last week, therefore, show a decrease on the latter number, amounting to 217; but it will be observed that the average is in part founded on the aggravated mortality of last year. The deaths from phthisis, or consumption, are still less numerous than usual, having last week been 121; in corresponding weeks they fluctuated between 120 and 156. In the class which comprises other diseases of the respiratory organs, the deaths, amounting to 74, also fall below the average. The zymotic or epidemic class numbers 272 deaths; and, though this mortality is not yet excessive as compared with that of the same week in some previous years, it shows a tendency to increase as the autumnal season approaches. Small-pox, measles, scarlatina, hooping-cough and typhus, show less than the usual fatality or differ little from the average; but diarrhœa exhibits a rapid increase on the previous weeks, and has now risen above the average. The numbers from diarrhœa, in the last four weeks, have been successively 40, 37, 51, and 104. Of the 104 persons who died of it last week, 84 were infants under 1 year, 14 were 1 year old and under 60, and 6 were 60 years of age and upwards. Last week 13 deaths were ascribed to cholera, showing an increase when compared with those of the previous returns; but an investigation of the cases, as detailed in the registers, proves that in a certain proportion of them it was the common English form of the complaint. In the Rectory sub-district, Marylebone, on the 24th July, at 11, Orchard-place, the son of a labourer, aged 3 years, "cholera (24 hours)." "This (says Mr. Joseph) is a small house in the rear of a densely-crowded place, well known in Marylebone, which, though in a much better condition than formerly, is still imperfectly cleansed and ventilated." Also in the Rectory sub-district, at 2, Paradise-row, on July 23, the son of a smith, 3 years, "cholera (3 days)." "The child had diarrhœa for a week previous. Its parents lived in a small front parlour, with five other children. The locality is crowded." In St. John's, Marylebone, at 14, Henry-street East, on July 25, the son of a shoemaker, aged 1 year, "English cholera (5 days)." In the same sub-district, at 16, Townshend cottages, on July 24, the son of a labourer, aged 3 months, "cholera." In Islington East, at 48, King-street-terrace, on July 20, a working woman, spinster, aged 38 years, "cholera (12 hours), had diarrhœa 2 days." In West Hackney, at 13, Tottenham-square, on July 23, the son of a contractor, aged 3 months, "English cholera (3 days)." In the same neighbourhood, at 11, Tottenham-road, on July 25, the daughter of a draper, aged 1 year, "English cholera (5 days), convulsions (12 hours)." In North St. Giles-in-the-Fields, at 12, Great White Lion-street, on July 23, the daughter of a printer, aged 7 months, "English cholera (7 days)." In Pentonville, at 9, Pentongrove, on July 23, the son of a police constable, aged 6 months, "infantile cholera." In Whitechapel-church sub-district, at 17, Colchester-street, on July 24, the daughter of a shoemaker, aged 4 months, "Asiatic cholera (2 days)." Mr. Hems, the registrar, states that "the child was suckled by the mother for a fortnight, was afterwards brought up by hand, and never thrived. It was attacked with violent vomiting and purging on Sunday, recovered, and grew worse on Monday, when the medical attendant first saw the case, and pronounced it hopeless. The house is well-aired." In Lambeth, at 39, Wootton-street, July 24, the wife of a printer, aged 25 years, "cholera (2 days), peritonitis (3 weeks)." Mr. Mears states that "the house is clean and tolerably airy. It has a cesspool." Also in Lambeth, at 8, Vine-terrace, Waterloo-road, on July 21, the wife of a stonemason, aged 24 years, "cholera (10 hours)." "This person (says Mr. Daws) had been in delicate health for some months, and had only come the day before from Somersetshire." The medical attendant adds on his certificate, that "there was no purging, all the other symptoms were urgent, the secretion of urine suspended, the catheter was passed, but no urine in the bladder." The house is in an airy situation and well drained. In Lambeth, at 7, High-street, on July 19, a carpenter, aged 36, "Asiatic cholera (44 hours)." Mr. Harwood states, that "the deceased retired to rest about eleven o'clock in his usual state of health, but in about two hours awoke with violent cramp, which was followed by sickness and diarrhœa; these continued till death." In comparison with the above 13 deaths from cholera, registered last week, it is proper to mention that, in the corresponding week of 1846, there were 26 from the same disease; also 26 in that of 1848; and in that of 1849, the deaths from cholera rose to 783.

MORTALITY TABLE.

Deaths in the week ending Saturday, July 27, 1850.

(Metropolis.)

Causes of Death.	July 27. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	456	279	163	898	10217
Specified Causes	455	278	162	895	10160
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	216	40	16	272	3315
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	...	20	17	37	479
Tubercular Diseases	53	108	9	170	1920
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	51	28	25	104	1179
Diseases of the Heart and Blood-vessels	4	7	22	33	249
Diseases of the Lungs, and of the other Organs of Respiration	29	20	25	74	776
Diseases of the Stomach, Liver, and other Organs of Digestion	20	22	10	52	752
Diseases of the Kidneys, &c.	1	9	4	14	86
Childbirth, Diseases of the Uterus, &c.	...	7	1	8	97
Rheumatism, Diseases of the Bones, Joints, &c.	2	4	...	6	58
Diseases of the Skin, Cellular Tissue, &c.	...	...	1	1	8
Malformations	6	...	...	6	24
Premature Birth and Debility	29	2	...	31	228
Atrophy	27	...	...	27	235
Age	...	...	31	31	435
Sudden	1	...	...	1	84
Violence, Privation, Cold, and Intemperance	16	11	1	28	235
Causes not Specified	1	1	1	3	57

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	July 27, 1850.	Sum of Ten Weeks.
London	1948369	898	10217
West	301189	130	1442
North	376568	177	1885
Central	374199	158	1820
East	393067	202	2194
South	503346	231	2876

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	19	Heart	28	Phthisis	121
Bronchitis	30	Hooping-cough	25	Pneumonia	30
Cholera	13	Hydrocephalus	26	Scarlatina	23
Childbirth	2	Influenza	2	Small-pox	5
Convulsions	29	Liver	7	Stomach	3
Diarrhœa	104	Lungs	4	Teething	12
Dropsy	12	Measles	21	Typhus	35
Erysipelas	9	Paralysis	18	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	664	439	225
Females	680	459	221
Total	1344	898	446

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·843	63·6	59·9	+ 3.3	A.M. Calm.	P.M. Calm.	Miles. 35	0·00	Positive, and tension weak during the morning.
Monday	29·815	68·8	59·0	+ 8·4	S.S.E.	E.	70	0·00	Positive, and tension weak generally during the day.
Tuesday.....	29·681	72·3	62·7	+ 11·7	E.	E. & S.W.	80	0·10	Positive, and tension weak at 9 p.m.
Wednesday.	29·789	62·6	55·0	+ 1·7	W.	S.W.	75	0·04	Positive, and tension strong at 9 p.m.
Thursday ...	29·559	59·7	57·7	— 1·6	S.S.W.&E	S.W.	120	0·41	Negative, and very active between noon and 3 p.m.
Friday	29·554	59·8	54·7	— 1·7	W.S.W.	W.	105	0·00	Nothing was shown during the day.
Saturday ...	29·599	57·4	56·1	— 4·3	W.	W.S.W. & N.	140	0·28	Nothing was shown during the day.
Means ...	29·691	63·4	57·9	+ 2·5	E. & S.W.		SUM 625	SUM 0·83	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

The receipt of books, pamphlets and newspapers, letters, and other communications, are acknowledged from Mr. Heale, Licenciate of the Royal College of Physicians, &c. &c. (Too late for last week's publication.) Mr. W. Cooper Dendy, Surgeon to the Infirmary for Children, "On the relative Symptomatology of the Cranial and Abdominal Viscera in Children, (shall receive as early insertion as the crowded state of our original communication box will allow); Finis, (really must apply to Dr. Wardrop, whose address is 2, Charles-street, St. James's-square); Dr. Hays, M.D., Surgeon to Will's Hospital, United States, "The American Journal of the Medical Sciences. No. XXXIX. New Series. Pp. 284. Philadelphia. July, 1850.—M.D.; Mr. Couch, of Penzance, (shall be inserted in our next Number); Dr. Ogier Ward, of Kensington; Mr. Spencer Wells; M.D., Bath; Dr. Roe, of Plymouth; Mr. Hooper, of the Queen's-road, (case communicated by Dr. Waller will appear next week); Mr. Haynes Walton, (we hope next week to find space for Mr. Walton's XIII. Lecture on Ophthalmic Surgery); Mr. D. O. Edward's "Description of a New Method of Converting Gas and other Elastic Fluids into Fuel for Fire;" M.D.; Inquirer; A Country Practitioner; A Village Surgeon; Not the Serjeant Surgeon; X. Y. Z.; Mr. Jones, of Bristol; and Mr. Henderson, of Portsmouth,—eight Letters on the Surgical Treatment of the late Sir Robert Peel; Mr. Charles Hawkins, of Savile-row; Dr. Routh; Mr. Walsh, of Half Moon-street; Mr. Raynes, of Grindley (*next week*); Annual Report of the Royal Edinburgh Asylum for the Insane for the year 1849, pp. 39; Pharmaceutical Journal and Transactions, edited by Jacob Bell, for August, 1850; Mr. Mayo, of Winchester.

The Late Sir Robert Peel.—We bave received eight letters commenting upon the surgical treatment of this lamented statesman. "Why was not chloroform used?" asks one Correspondent; "Why was he not bled?" inquires another; "Why had he leeches?" a third; "After death, and not till then, a fracture was discovered in one of the ribs of the deceased," says our respected friend, "M. D.;" "Why was he not stripped, and carefully examined?" asks a fifth; a sixth complains that all that is known about the treatment is, "that they put on twenty leeches, and allowed no food;" "Why was there no Coroner's inquest?" asks a seventh; "And what was the cause of death?" demands No. eight.

That bachelors' wives and children are always the best guided, is a saying as old as the hills. We fear it is in like manner incident to poor human nature, for most of us to think we can do better than our neighbours; and for some Physicians and Surgeons to imagine they could and would have treated a case they did not see, better than those under whose care it terminated fatally. Perhaps our correspondents will allow us briefly to reply to their several questions, while we refer them to our Journal for July 13, in which they will find an *authentic* notice of Sir Robert's death. Chloroform was not used because the patient was in a state of collapse; for the same reason he was not bled; a few leeches were applied when re-action appeared to have set in; fracture *was* discovered at the first; he *was* stripped and carefully examined; we do not see that the treatment could have been otherwise than merely palliative; it is not usual in such cases to require the Coroner's assistance—most assuredly it was not required; and the cause of death was rupture of the subclavian vein.

T. W., Medical Student.—The letter was unavoidably omitted in our last Number. We never knowingly publish, nor is it the custom of journalists to publish letters that appear in contemporaneous prints; for this reason we must *now* decline *T. W.*'s communication.

We have received another portion of the MS. of Dr. Wardrop's Work on the Heart, and we confidently hope that we shall be able to deliver the whole to our subscribers this month.

[To the Editor of the Medical Times.]

Sir,—Will you kindly satisfy a non-professional reader of yours with an answer to the following inquiry:—How many weeks is the gestation in the female; and whether a child born the day the thirty-third week was completed, from November 19th to July 9th, the husband has any reason to be suspicious of his wife's fidelity, coupled with some other slight cause for it,—

I am, Sir, J. C.

*** The usual period of gestation in the human female is from the thirty-ninth to the fortieth week; some women, however, never proceed beyond the thirty-seventh. Examples are also very frequent where an apparently well developed fœtus has been expelled at a much earlier period, namely, at the thirtieth week, and the child has been reared without any difficulty. We think, therefore, our correspondent is not warranted in entertaining any suspicion of "his wife's fidelity" from the fact to which he refers.

Range of the Human Voice.

[To the Editor of the Medical Times.]

Sir,—Your kindness in replying to questions induces me to beg you, or one of your numerous correspondents, to inform me what is the range of the human voice. I am, &c. William Stevenson.

York.

*** There are about nine perfect tones, but 17,592,186,044,415 different sounds.

Thus, 14 direct muscles, alone or together, produce ... 16,383
30 indirect muscles ditto 173,741,823

And all in co-operation produce the number we have named; and these independently of different degrees of intensity.

Mr. M.—We are obliged for the information. It is no more than we expected; for we never supposed that our Northern brethren were more skilled in the use of chloroform than the members of the profession in the metropolis. That death has occurred on several occasions in at least one of the Scottish hospitals, from the use of chloroform, we are more sorry than surprised to hear. It is so powerful an agent, and medical men are still so little acquainted with the circumstances under which it may be safely used, and those which are likely to cause a fatal termination when it has been exhibited, that no one ought to be astonished should an unfortunate patient fall a victim to its application. The true physiological and pathological history of chloroform, as an anæsthetic agent, is yet to be written.

M.R.C.S., Manchester.—The chief Lying-in Hospitals give certificates irrespective of the Colleges, which, we are inclined to think, confer the power of practising in midwifery. The second part of the question is very doubtful.

J. W., Dispensary, Hull.—The question should be referred to H. Blatch, Esq., Secretary, Apothecaries' Hall, Blackfriars, London.

Nepos.—We fear the letter is mislaid. Will Nepos write privately and fully to us.

A Young Dentist should apply to his old master. He will, however, find in "Beasley's Druggists' Receipt-book" no less than thirteen cements described for stopping the cavities of teeth.

A Constant Reader, on referring to the Indices of our Volumes, will easily find a description of Mr. Tweed's artificial leech; and we are quite sure that gentleman will afford him any further information he may require.

A Very Old Subscriber will find his question answered. We are delighted at all times to listen to suggestions, especially when kindly meant.

Mr. Wright will, we think, see the propriety of allowing the subject of his letter to drop. It is hardly kind to the friends, and may, besides, be wrongly interpreted as regards himself.

The proofs of Dr. King's valuable paper reached us too late for publication in this Number.

Indus will, we hope, allow us to append his name to his remarks on the beneficial effects of morphia in various diseases.

The Report of the Royal Society, containing an abstract of Mr. Toynbee's paper, is unavoidably postponed until next week, and several other communications now in type.

ORIGINAL LECTURES.

LECTURES

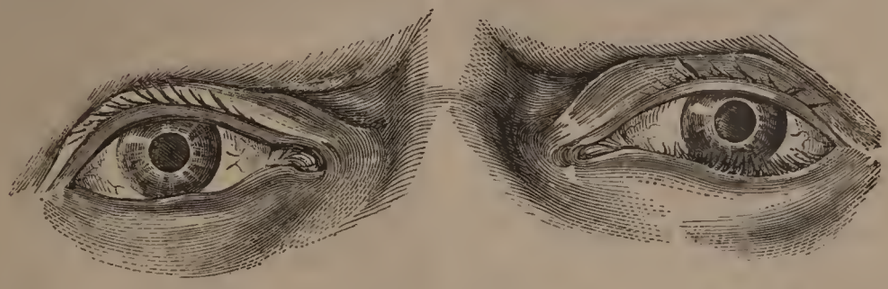
ON

OPERATIVE OPHTHALMIC SURGERY.

DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By H. HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XII.



[The part of this lecture that relates to the cause and treatment of entropium has been already published in the Number of the *Medical Times* for May 25th, under the head of "Original Communications." This anticipation was at the request of Mr. Walton, in order that his views, which he believes to be original, of the immediate cause of the affection and its removal, should be made public without delay, that those surgeons who had heard of his practice, and were endeavouring to follow it, (for he knew that it was being tried,) should have a correct explanation of those views and his exact manner of operating; without which, he feared that the operation would be imperfectly executed, and so be thought useless or impracticable.—Ed. *Medical Times.*]

Continuation of the Lecture on Entropium.—Trichiasis, in combination with Entropium and the cause of the Trichiasis.—The importance of ascertaining whether the two co-exist.—Mode of treating the combination.—The effect of Entropium independently of the cilia being thrown on the globe.—Case illustrative of treatment, with the manner of operating.—Entropium of lower lid.—The manner of inversion of the lower lid compared with that of the upper lid, and the difference shown —Woodcut illustrating the appearance of Entropium.—Narrative of case showing the nature of the affection and the treatment.—Mention of the old plan of operating.

Heretofore, I have spoken only of those cases of entropium which were not complicated with trichiasis or turning in of the cilia, by which their natural relation to the edge of the lid is altered. With inversion of the upper lid, there is frequently more or less of trichiasis, which may be due to the same exciting causes that produce the entropium, or the trichiasis may have been the original affection, and have induced the entropium, or, merely an effect of it, from the cilia having been brought into contact with the globe, and subjected to its motions, whereby their normal position has been altered; and the misdirection thus given to them becomes in time permanent trichiasis. With entropium, and its consequent irritation to the eye, the edge of the lid can scarcely be healthy, and, if unhealthy, the morbid action implicates the cilia; hence they will the more easily retain any unnatural position that may be given to them. I am inclined to believe this to be most frequently the cause of the trichiasis, because trichiasis with entropium is generally slight, and the removal of the entropium is frequently sufficient to clear the globe of the cilia. Practically speaking, therefore, though such a degree of trichiasis matters little, yet it is very important, before operating for entropium, to ascertain whether there is also trichiasis, and whether the restoration of the lid to its natural state will or will not counteract the mal-direction of the cilia. Should it not be sufficient, then more skin must be taken from the lid than otherwise, and an amount of eversion produced; but that must have its limit, or else the one evil would be exchanged for another. When it is apparent that moderate eversion will not suffice, the entropium must first be removed, and the trichiasis must be treated afterwards by excising the cilia. When the cilia have been plucked out or broken off, the direction that they would assume when grown cannot be judged of, and the case must be watched. For the most part, only a few isolated cilia, a clump of them, turn in sufficiently to touch the globe, and their removal is not detrimental to the lid. When there are several groups of them in different parts of the lid, I think that less deformity will ensue if the entire cilia, regular and irregular, be taken away. It might be asked, why not, in the first instance, in such cases, remove the cilia,—will not that be sufficient to rid the eye of all irritation? would inversion of the lid, without them, be injurious? In the upper lid, I think that it would be; in the lower lid, there can be no doubt about it. The great mischief that entropium of the upper lid produces is doubtless mainly owing to the irritation of the cilia on the globe, and especially on the cornea; but I think that the inversion of the edge of that lid, which is very much less in degree than the lower lid is capable of, is also injurious, and the more so when it has become enlarged and hardened. I strongly suspect that an enlarged and hardened state is of itself capable, without entropium, of irritating the cornea, and rendering it more or less opaque. Besides, it is scarcely possible, before the operation for the entropium has been done, and the lid has recovered from it, to ascertain with exactness to what extent the trichiasis may be benefited. The following case, which is an interesting one, will illustrate my subject:—

A female, aged 40, applied at the hospital with entropium and trichiasis of both upper eyelids, of three years' standing; some of the cilia had been pulled out at various times, and with temporary benefit, but, as she was getting worse and worse, and her sight was nearly lost, she left the gentleman under whose care she had been, and, from the recommendation of a former fellow-sufferer, she applied to the hospital. I operated for the entropium, and removed rather more skin than was sufficient to restore the lids to their natural position, and everted them a little, to get the lashes out of the reach of the cornea. In the right eye the intention was answered, but, in the left, a bundle of cilia, that passed from the centre of the lid, still encroached on the globe. Some weeks after, I removed them in this manner: I placed the tip of the fore-finger under the lid, to raise it and render it firm, and also to protect the globe; then I made three incisions through the skin and orbicular muscle, down to the cartilage, one on each side of the cilia and a third above them, and seizing the little trilateral piece dissected it off, taking care to keep the edge of the knife close to the cartilage that the roots of the cilia should not be cut across, for, unless they are entirely removed, the operation would not be effectual. The operation may be done in other ways,—and I will show how when I come to speak of trichiasis alone. After the incisions have been made it is not absolutely necessary that the lid be supported by anything placed under it, but perhaps it is better that it should be, and, as the fore-finger is required for the use of the forceps, the third finger must take its place.

It is seldom that the removal of entropium from the lower lid does not at the same time free the globe from the contact of any cilia that may be irregular; I have met with but one exception. Entropium of the lower lid is, generally speak-

ing, an affection of little severity; the cilia rarely come into contact with the cornea, and vision is not impaired by it, except in a slight manner, from the irritation it causes to the eye. The contact of the cilia with the sclerotica is less injurious. I have known some of the most inveterate cases that seemed to produce no more inconvenience than slight lachrymation; but I think that in the advanced stage, where there is perfect inversion of the edge of the lid, the injury to the eye is less, because the cilia no longer recline against the globe, by the motions of which their position is changed, and hence the greater irritation that they occasion, but by the manner the lid is folded inwards, they are, as it were, put out of the way; they lie between the outer surface of the lid and the sinus, as it is called; (that is, the concavity formed by the reflection of the conjunctiva from the globe to the lid,) which parts are then brought into contact. But beyond that, there is no doubt that after a certain time the conjunctiva undergoes slight structural changes, by which it resists or tolerates, in a measure, the mechanical violence that the entropium effects.

The drawing shows well the two stages of the affection. In the right eye the edge of the lower lid is seen completely turned in; in the left it is only tilted or half inverted, and the cilia rest on the globe. Usually they do not reach so high as the cornea, for with the inversion there is generally some depression of the lid.

I did not record the particulars of that case. I operated on each lid, and the success was perfect. I will narrate briefly those of a parallel case which I have copied from my note-book, to show you the usual course that the affection takes. Jonathan Bottomly, aged 71, a patient at the hospital. Both lower eye-lids are inverted, and the cilia are quite hidden; the corneæ are transparent; the eyes are slightly inflamed; the conjunctiva at the lower part of the globe is somewhat thickened, and rather more inflamed than elsewhere. For about a period of five years his eyes have been "troublesome;" at first they used to gum up at night, that ceased, and ever since they have been more or less sore and watery; sometimes, while at work, they water so much that he is obliged to leave off for awhile. He is not aware that the lids are at fault. I operated on this man also after my method, as detailed in the beginning of the lecture, and with the best results. I removed with the muscle very much less skin than I had done in any previous case; in fact, very little more than was sufficient to enable me to dissect off enough of the muscular fibres.

In a few cases I have seen opacity of the lower part of the cornea resulting from entropium of the lower lid. One of them, an old man, who had been at Waterloo, was among my earliest patients at the hospital. I proceeded according to the old plan of pinching up the skin and cutting off a fold with a pair of scissors; and, although I removed a large portion, the entropium returned in each lid. I operated a second time, removing a still larger amount, and it succeeded, but the lids were depressed by it. My next leeture will be devoted to trichiasis and ectropium.

ORIGINAL COMMUNICATIONS.

THE LOCALITY OF CHOLERA IN ST. GILES'S IN 1832 AND 1849.

By Dr. KING,

Medical Superintendent of Bilston and Darlaston in Staffordshire in 1832, and Superintending Medical Inspector of Lambeth, Newington, Camberwell, St. Giles's, St. Martin's, and the Strand and Holborn Unions in 1849.

The epidemic of 1849, illustrated by St. Giles's, and suggestive of the gaseous origin of cholera, is the title of a paper I have prepared for critieism, which will soon be in a condition to print.

The gaseous origin of cholera suggests itself to my mind as the result of a large field of observation extended over Bilston and Darlaston in Staffordshire in 1832, and Lambeth, Newington, Camberwell, St. Giles's, St. Martin's, and the Strand and Holborn Unions in 1849.

By kind permission of the Registrar-General, and the Board of Guardians of St. Giles's, I have had access to their valuable records, and of Captain Yolland of the Ordnance Survey to the ordnance skeleton map. As a first gathering from these fruitful sources I offer the present paper.

Table 1 distributes over 71 streets, 436 attacks, and 215 deaths, and marks the intensity of attack in each street.

Table 2 names the streets, and marks the houses which had mortality in 1832 and not in 1849, and in 1849 and not in 1832; and the references after the numbers denote the intensity of the mortality. For example, 21*, Buckeridge-street, lost two lives in 1832, and 11†, Brownlow-street three lives in 1849; while 7, Alfred-mews, having no reference after the number, lost but one life. The 0 signifies that the number of the house was not appended to the death.

Table 3 names the streets, and marks the houses which had mortality both in 1832 and 1849, and records the intensity of the mortality. By adding this table to that portion of table 2, appropriated to 1832, or to that to 1849, the whole mortality of 1832 or 1849 is obtained.

Table 4 deals with the 26 streets which had cholera both in 1832 and 1849, so as to mark the limits within which the mortality is confined in each street.

Table I.

Streets.	Attacks.	Deaths.	Deaths.	Attacks.	Streets.
Bainbridge-street	7	1	4	4	Johnson-court
Barley-court	3	1	6	10	Jones'-court
Belton-street	2	1	1	1	High Holborn
Bloomsbury-court	2	—	3	5	Kennedy-court
Brewer-street	2	2	1	1	Keppel-mews
Broad-street	1	1	—	2	King-st., Seven Dials
Brown's-buildings	1	1	1	4	King-st., Drury-lane
Buckeridge-street	47	13	—	1	Lascelles-court
Buckeridge-court	2	—	—	1	Lascelles-place
Burnett's-buildings	1	1	4	6	Lawrence-lane
Bury-street	2	—	1	1	Little Denmark-street
Carrier-street	15	8	1	1	Little Russel-street
Castle-street	2	—	1	1	Lloyd's-court
Charles-street	48	21	—	1	Lumbar-court
Charlotte-street	1	1	16	24	Maynard-street
Chapel-place	1	1	2	3	Middle-row
Church-street	36	8	2	2	Monmouth-court
Church-lane	61	30	4	5	Neal's-yard
Clark's-buildings	1	—	—	1	New Compton-street
Coal-yard	5	3	1	1	New-court
Colonnade	1	1	1	4	Newton-street
Crown-street	2	1	2	5	Nottingham-court
Cross-lane	3	2	5	13	Parker-street
Drury-lane	2	—	1	2	Phœnix-street
Dudley-court	7	4	—	1	Pitt's-place
Dudley-street	4	1	—	1	Princes-street
George-street	18	12	5	6	Shaw's-court
Gilbert-street	3	1	3	11	Short's-gardens
Great Earl-street	1	1	1	2	Smart's-buildings
Great St. Andrew-st.	11	8	6	6	Stewart's-rents
Great White Lion-st.	2	—	—	3	Tower-street
Great Wild-street	5	5	—	1	Vinegar-yard
High-street	1	—	2	2	Whitehall-place
Hog-yard	8	7	1	1	White Lion-court
Ivy-court	10	6	3	4	Wild-court
Ivy lane	1	1	215	436	Totals

Table II.

Cholera Mortality.

1832		1849	
4	Barley-court	Alfred-mews	7
13	Belton-street	Brownlow-street	18, 11†
5	Bowl-yard	Compton-street	23
1	Bainbridge-street	Crown-place	6
1, 2	Brewer-street	Duke-st., Oxford-st.	17
0	Brown's-buildings	Duke-st., Lincoln's-inn	44, 1
0, 1, 3, 6, 13, 21,* 24, 25,* 26, 28, 29	Buckeridge-street	Drury-lane	185
		Endell-street	28, 17,* 16,* 15
5	Burnett's-buildings	Guildford-street	61
2	Charlotte-street	Henrietta-mews	11
16	Chapel-place	High-street	21, 10
14	Gilbert-street	Hyde-street	33
0, 0, 2, 9‡	Hog-yard	Holborn	255
13	High Holborn	King-st., Drury-lane	38, 23, 12, *11
1, 3, 5,† 12	Jones'-court	Kenton-street	44, 35, 12
7	Ivy-lane	Lascelles-court	14,* 13, 11, 7, 5, 4†
1, 2*	Johnson-court	Lascelles-place	2
40	Keppel-mews	Lumbar-court	20
7	Little Denmark-st.	Little Coram-street	18
19	Little Russel-street	Little White Lion-st.	2*
1, 3,* 5,* 6, 8, †15,† 16,* 18*	Maynard-street	Little Wild-street	2
		Little Earl-street	15*
3, 12	Middle-row	Marchmont-street	58
3*	Monmouth-court	Montague-place	24
3	New-court	Museum-street	58, 39, 5
0, 1, 2,* 3	Shaw's-court	New-street	5, 4,* 2‡
6	Smart's-buildings	Queen-street	57
3, 6, 13,† 21	Stewart's-rents	Queen-street South	26, 24, 22*, 8†
0, 0	Whitehall-place	Queen's-place	4
5	White Lion-court	Red Lion-yard	2
		Regent's-place	7, 2‡
		Smith's-court	6
		Star-court	9, 2, 1
		John's-court	2
		Tower-street	28,* 24,† 22, 4
		White Lion-street	0
		Wild Passage	2*
82	28	37	90

TABLE III.

CHOLERA MORTALITY.

1832.		1849.	
1	41 Broad-street	47, 30, 22†	5
8	1,† 3,* 9, 11, 13 Carrier-street	11, 3	2
21	{2,* 10,* 11,* 12, 14, 15,* 17, 22,* 28, 31, 34,* 38,* 43, 51} Charles-street	{44, 42, 38, 36, 34, 32, 31,* 13, 8, 1, 0}	12
8	4, 8, 10, 17, 21,* 22, 26 Church-street	11	1
30	{1, 2, 3,† 6,† 9, 12,† 14, 15, 16,* 17,* 18, 20, 24,‡ 25, 27, 28,† 55} Church-lane	{28, 27,§ 24, 22, 21,† 20,* 18,† 17, 16, 15, 10,† 8,‡ 7,§ 6, 4,† 3,† 2, 1,* 0}	43
3	2, 9, 15 Coal-yard	21	1
1	27 Colonnade	11	1
2	8, 10 Cross-lane	7, 3	2
1	20 Crown-street	24	1
4	1,† 10 Dudley-court	14	1
1	50 Dudley-street	85, 84,† 65, 57, 36, 28, 19*	10
1	37 Great Earl-street	17, 14, 13, 11,† 10†	9
8	4, 8, 11,* 29,* 39, 47 Great St. Andrew-st.	47, 42, 35,‡ 7, 4	8
5	10, 13, 14,* 40 Great Wild-street	58, 47, 16	3
12	{1, 17, 26, 29, 33,* 35, 36,* 38,* 48} George-street	24, 15, 11, 7	4
3	1, 5* Kennedy-court	5, 4,* 3†	6
1	18 King-st., Seven Dls	{36, 34, 29, 25,* 23, 21,* 16, 15,† 14,* 10, 4}	16
4	0, 4, 8* Lawrence-lane	8	1
1	5 Lloyd's-court	4†	3
4	1, 2, 4* Neal's-yard	4	1
2	3, 4 Nottingham-court	10	1
1	13 Newton-street	14, 9	2
5	9,* 23, 38, 44 Parker-street	52, 51,‡ 9, 8	7
1	2 Phœnix-street	14, 4,* 3, 2	5
3	15, 21* Short's-gardens	11,* 0	3
3	2, 3* Wild-court	5, 4, 3, 1	4
	134	26	152

TABLE IV.

	Houses with Mortality in 1832	Houses with Mortality in 1849	Instances of Mortality in same house	Instances of Mortality within 8 doors	Instances of Mortality within 4 doors	Instances of Mortality within 2 doors	Instances of Mortality next door
Colonnade	1	1	—				
Coal-yard	3	1	—	1			
Broad-street	1	3	—	1			
Crown-street	1	1	—	1	1		
Lawrence-lane	3	1	1	1	1		
Neal's-yard	3	1	1	1	2	1	
Carrier-street	5	2	2	3	3	2	
George-street	9	4	—	4	2	2	
Cross-lane	2	2	—	2	2	1	1
Charles-street	14	11	3	8	9	7	4
Church-lane	17	19	12	8	4	4	3
Church-street	7	1	—	4	2	2	1
Great St. Andrew-street	6	5	1	4	2	1	1
Lloyd's-court	1	1	—	1	1	1	1
Newton-street	1	2	—	1	1	1	1
Parker-street	4	4	1	1	1	1	1
Phœnix-street	1	4	1	1	1	1	1
Wild-court	2	4	1	1	1	1	1
Great Wild-street	4	3	—	4	2	1	
Kennedy-court	2	1	1	1	1	1	
King-street, Seven Dials	1	11	—	1	1	1	
Short's gardens	2	2	—	1	1	1	
Dudley-court	2	1	—	1			
Nottingham-court	2	1	—	2			
Dudley-street	2	7	—				
Great Earl-street	1	5	—				
	Total, 26 streets—Instances, 96.	Total, 26 streets—Instances, 100.	Total, 16 streets—Instances, 24.	Total, 23 streets—Instances, 53.	Total, 20 streets—Instances, 39.	Total, 16 streets—Instances, 28.	Total, 10 streets—Instances, 15.

17, Savile-row, July 13, 1850.

ON THE MEDICINAL ACTION OF ARSENIC IN CUTANEOUS AND OTHER DISEASES.

BY THOMAS HUNT, Esq., M.R.C.S., &c.

No. I.

THE action of medicines on the human body is either self-obvious, as in the case of emetics and purgatives; or, the subject of dispute and controversy, as in the case of most of the materia medica. This discrepancy of opinion appears to arise in a great degree from the diversity of effect which the same medicine may produce under different circumstances. The dose, the frequency of its repetition, the condition of the patient, the mode of administration or of combination, are all calculated to effect a variety of results not inherent in the medicine itself. There are, therefore, two objects of inquiry before us:—1. What is the inherent therapeutic power of arsenic in small and medicinal doses? 2. What conditions of administration are most favourable to its efficacy?

Experimental observations on the action of arsenic in cutaneous diseases had been systematically instituted by the writer in his own private sphere, for upwards of twenty years before he ventured to publish the results. And as these results appeared to take the profession by surprise, awakening sanguine hopes in some quarters, and incredulity in others, it was determined to appeal to practical men who had used the medicine largely without having recorded their experience. Such practitioners, it was presumed, were better acquainted with the subject than the mere writers of their generation. But how to get access to their valuable stores of knowledge was the difficulty. Reflecting, however, that many of these were rural practitioners, it was resolved to apply to them through the medium of the Provincial Association, and to make personal application at the same time to those metropolitan practitioners who were most likely to be possessed of valuable facts. To the honour of the profession be it spoken, no less than *seventy-five* medical practitioners, all more or less engaged in practice, took the trouble to reply to inquiries respecting their experience in the medicinal action of arsenic. The substance of their replies is published in the "Transactions of the Provincial, Medical, and Surgical Association." (Vol. XVI. Part 2.) The value of this paper may be presumed to be intrinsic and lasting. Some of the most gifted and most respected members of the profession, both metropolitan and provincial, generously lent their aid in the inquiry, and the whole presents a view of the medicinal use made of arsenic in England in the middle of the 19th century. The subject, however, is not exhausted. The paper contains scarcely any reference to what had previously been written on the subject. It is proposed, therefore, in this series of essays, to review the whole subject, and to inquire what is the real value of this powerful agent in the treatment of cutaneous diseases, intermittents, neuralgia, lupus, cancer, uterine disorders, chorea, chronic rheumatism, secondary syphilis, dyspepsia, and some other diseases, concluding with some practical observations on the best mode of administering it with safety and success.

1. ON THE USE OF ARSENIC IN CUTANEOUS DISEASES.

There is scarcely an author who has written on chronic cutaneous diseases, who does not extol arsenic as one at least of the most potent remedies. Yet it must be acknowledged that these commendations are mingled with many cautions and reservations,—so many indeed as to deter timid practitioners from its use.

Out of seventy-five practitioners who were so kind as to respond to the inquiries above alluded to, not fewer than sixty-three reported that they had used arsenic successfully in cutaneous affections, more especially in those of the squamous kind; but not less than sixteen different varieties of cutaneous disease are mentioned as having been more or less relieved by this medicine. The number of cases in which arsenic has been used by these sixty-three gentlemen, amounts to about three thousand. Only two or three report that they have been more or less disappointed in the use of arsenic. The rest, or about 95 per cent., are encouraged by the results of their experience to believe in the general efficiency of arsenic in these diseases. When it is considered that chronic cutaneous affections are by no means ephemeral; that, on the contrary, they usually show a persistent tendency, an inveteracy, a disposition to spread, and to become increas-

ingly troublesome to the very end of the patient's days; and, moreover, that they are very generally found (as is acknowledged by all writers on the skin) most intractable and unmanageable, showing no disposition to yield to ordinary treatment;—the above evidence in favour of arsenic as a remedy—the evidence both of writers and of practitioners—appears to be as strong as general evidence can possibly be. One cannot withhold assent to the conclusion that arsenic has a special claim to our attention as a remedy for chronic cutaneous diseases.

But the question admits of special evidence. Has arsenic ever been administered alone, alternately with other alteratives, for the purpose of comparing the results? It has.

Cases 1, 2, 3.—Three cases of chronic eczema are reported in the *Medical Gazette* in the year 1841, under the care of Mr. Phillips, in the female wards of the St. Marylebone Infirmary. The patients were of the ages, respectively, of 38, 52, and 61. The two former presented at one period, on the hand and arm, the impetiginoid form of the disease. They were all treated first by tepid bathing every other night, and a drachm of sulphate of magnesia and ten minims of dilute sulphuric acid were administered three times a day for a month, with a certain, though small amount of benefit. Secondly, five minims of the tincture of cantharides were added to each dose. The relief now afforded to the younger patient was rapid and decided, and in six weeks she was discharged cured. In the other two cases no decided advantage was gained, although the dose was increased to fifteen minims thrice a day. Thirdly, both of these patients took five minims of the liquor potassæ arsenitis thrice a day. This produced, on both cases, a striking effect in ten days, and by the end of the fifth week the disease was gone; slight œdema of the lower limbs only remaining, which soon yielded to bandaging. There is no room for doubting the efficiency of arsenic in these cases, else I could adduce from my own note-book, fifty cases equally conclusive, in which a chronic disease of the skin has been proof against the cantharides, the mineral acids, alkalis, iodine, tar, and other remedies of acknowledged power, and yet has yielded to arsenic. As I have already published many of these cases in my treatise on diseases of the skin, the above may suffice as the result of the experiment of substituting arsenic for another medicine of acknowledged power.

But perhaps the experiment of administering the medicine for a time, and then withholding it, leaving the case to nature, and afterwards resuming the use of the medicine, would be, to some minds, more satisfactory than any other mode of testing its therapeutical powers. This experiment I have seen so frequently tried, and with such generally uniform results, that I consider the power of arsenic over cutaneous disease as well established as the action of any alterative remedy—perhaps better. The following cases are in point. In some of them the dose was reduced, and in others the medicine was wholly suspended for a time, then resumed.

Case 4.—*Prurigo Scroti.*—A gentleman had suffered for many months, and in an intolerable degree, from this distressing affliction; and nothing had given him any relief. The disease was sthenic and inflammatory in its character, as indicated by the pulse, although there was no local inflammation apparent. Accordingly, after bleeding and purging had reduced the pulse, arsenic was administered as follows:—

1836. April 16th.—Liq. arsenicalis, ♏ v. ter in die.

22nd.—No amendment. Liq. arsen. ♏ vij. ter in die.

29th.—No relief, except from ablutions. Liq. arsen. ♏ viij. ter in die.

May 1st.—Pruritus nearly gone; conjunctiva slightly inflamed. Reduce the dose to *five minims*.

9th.—The pruritus has returned in an annoying degree. Liq. arsen. ♏ vij. ter in die.

17th.—No pruritus. Conjunctiva inflamed. Papulæ no longer visible. He considers himself cured. Discontinue the arsenic.

24th.—No return of the pruritus.

This case evidently yielded to arsenic, as proved by its obstinancy under a small dose, its improvement under an *increased* dose, its relapse when the dose was *reduced*, and its ultimate recovery on the full dose. The case is not adduced to illustrate the advantage of increasing the dose, for, generally speaking, this is bad practice; but to prove beyond doubt or cavil, the palpable control exercised by the medicine over the disease, which, to the best of my knowledge, has never relapsed.

Case 5.—*Psoriasis.*—A young lady, who had been troubled with psoriasis for several years, reported that she had formerly taken arsenic for it, but "it did not agree with her." She afterwards tried cantharides, but without any permanent or very obvious benefit.

Nov. 21st, 1838.—Liq. arsenicalis, ♏ iv. ter in die.

May 12th, 1839.—Reports that the arsenic was of great service to her, but since she discontinued it the disease has returned as bad as ever. Resume the arsenic in four minim doses.

The disease was soon checked, but she again neglected the medicine, which she afterwards took, "off and on," for more than ten years, the disease invariably yielding most readily to every course, the eruption generally disappearing entirely after a few weeks, and returning as regularly when the medicine had been laid aside for a month or two. At length she was induced to take it with sufficient steadiness to justify hopes of the final subjugation of the disease.

Case 6.—*Lepra Vulgaris.*—A married lady, about 25 years of age, had been troubled with lepra from infancy, and had found no benefit from treatment.

June 26th, 1845.—Extensive circular patches of lepra vulgaris on the arms and legs, especially the latter, and smaller patches over nearly the whole body. Liq. arsenicalis ♏v. ter in die.

July 12th.—Patches fading; conjunctiva tender. Reduce the dose to 4 minims.

20th.—Disease nearly well. Persist.

30th.—Quite well; no scales to be found, only brown stains. Persist.

August 19th.—She has neglected her medicine for three weeks. The leprous patches are breaking out again "everywhere." Resume the arsenic.

Oct. 3rd.—She has taken the medicine till now, and the disease has again disappeared. Persist.

Nov. 23rd.—She has discontinued the arsenic, and the spots are returning.

She now took the medicine more steadily, and the disease again disappeared. In the following summer a small patch made its appearance which got well under a few doses of arsenic, and I have not heard of her since that time.

Case 7.—*Pityriasis Capitis.*—A gentleman, aged 58, had a scaly disease of the scalp ten years ago, which was cured by the late Mr. Scott of Bromley (probably by arsenic).

Nov. 25th, 1847.—The disease has returned six months, and the patient can get no relief from medicine. There is an eruption of fine scales over the scalp, and on the whiskered part of the face. The rest of the body is free from disease. Liq. arsenicalis ♏v. ter in die.

Dec. 9th.—Eruption fading. Persist.

30th.—Nearly well. Persist.

Jan. 20th, 1848.—Conjunctivitis and catarrh. Reduce the dose to 3 minims.

27th.—Slight return of cutaneous irritation and scaliness. Take 4 minims for a dose.

March 9th.—Skin quite well.

In the following spring the disease returned, and was cured by arsenic in a very short time.

These cases are only adduced as samples of the direct-experiment mode of settling medical disputes; but it is right to observe, that the experiments were not tried empirically. It was first ascertained that the patient was in a condition favourable for the advantageous exhibition of arsenic. What that condition is was discovered by another series of experiments which will be detailed in the next paper; and this will explain the reason why there is so much discrepancy of opinion in the profession, as regards the use of arsenic, both with respect to its efficacy and safety.

The facts already stated, demonstrate (if there be anything demonstrable in medical science,) that arsenic is not only a very important and useful agent in the treatment of chronic diseases of the skin, but that it has very frequently succeeded after other remedies have been fairly tried. The next paper will disclose other facts, showing how it may be administered effectually after having itself failed to do any good when exhibited indiscreetly on the one hand, or timidly on the other.

Bedford-square, July, 1850.

DIAGNOSIS AND TREATMENT OF PULMONARY CONSUMPTION.

By Dr. JOHN HUTCHINSON,

Assistant Physician to the Hospital for Consumption and Diseases of the Chest.

A physician of never so limited experience must frequently have listened to the conflicting statements of both the professional and non-professional public, touching the presence of pulmonary consumption in some particular case.

A patient tells us, Dr. A. says I have tubercles; but Dr. B. says I have not,—What say you? Or an anxious parent makes a similar observation in respect to her child. Thus, from time to time our art is branded with that great reproach, —"*its uncertainty.*"

Every one in the world either has or has not pulmonary consumption, and our patient is necessarily amongst this number. Nothing so completely shakes our confidence in the truth of any branch of science as conflicting opinions; there is no dispute amongst mankind which way a ponderous body will move when left to itself in the air.

If we look back a few years we find that the means of diagnosing pulmonary disease was enveloped in great darkness, this darkness was rendered more visible by Avenbrugger and Laennec, whose discoveries men ultimately received and carried onwards; indeed, this was an epoch to the study of disease of the lungs.

But now we have fallen into another error, that, namely, of almost entirely trusting to the ear in the investigation of thoracic disease, to the exclusion and neglect of certain great physical changes, of which the eye can take cognizance in the general contour, which are appreciable by the hand in the breathing-movements, and which are discoverable by the scales in the weight of the whole body.

These conditions of external form, of movement, and of weight, will be found more delicate tests of the first taint of phthisis pulmonalis than are the respiratory sounds; at any rate, the one in connexion with the other will considerably aid us in the resolution of the question,—the presence or absence of pulmonary consumption.

There are three great symptoms of pulmonary lesion, which appear in the following order:—

I. Loss of weight.

II. Diminished thoracic mobility.

III. Abnormal breathing-sounds.

1. *Loss of Weight.*—This is a constant and primary symptom; indeed we have never found evidence of this disease when the weight was undiminished; if, therefore, we can be sure on this point, namely, that the weight of our patient has not diminished, we are safe to affirm that there is no evidence of consumption. The validity, however, of this conclusion stands at first upon the correctness of the patient's word, but happily the word of the patient in this instance may be with considerable safety depended upon. We say, "Have you lost weight or flesh?" "Yes, Sir." "Are you sure?" "I am." "How do you know?" "By my clothes; I feel I have; I know I have," &c.; and the more we press the question the more definite and determined is the reply. Such answers may be relied upon, but when they reply with doubt, as "I think I have," "I cannot exactly say," "I never weighed," &c., then we may receive this as strong evidence that there is no loss of weight.

Thus, by the diagnostic of weight, we receive the first great mental bias of the presence or absence of consumption. A person may lose weight and not have consumption, but he cannot have consumption and not lose weight. This striking feature of consumption, viz., loss of weight, is now met in the all prevailing treatment of this day, the administration of cod-liver oil, a medicine intended to increase the weight, by the deposition of fat, which arrests the deposition of tubercular matter, as if fat and tubercle were the antithesis to each other. Indeed, we only judge of the benefit of this medicine upon the patient through the medium of the scales, for if the patient is not heavier, we cannot say he is better.

Of the Weight of the Body.—We have made 3000 observations upon the weight of healthy males at the middle period of life, and 1000 other observations upon phthisical males and females: thus we obtain, by the former, a certain approximation of what the normal weight should be, and by the latter of what the loss is by pulmonary consumption.

In health, although the weight of men differ, view the subject which way we please, yet we find as a law, that the weight increases with the height, and it is not impossible but that this increase is about 6½ lbs. per inch of stature from 5 to 6 feet.(a) True, the weights of men materially differ, *i. e.*, there is an oscillation from the thin to the stout man; they may differ 30 lbs. or 40 lbs., and a man may have consumption and yet weigh more than a thin healthy man; thus the phthisical weights oscillate from amongst the healthy weights to somewhere below them. Nevertheless, when we compare the diseased weight of, say 140 lbs., with a healthy weight of 140 lbs., they are *very* different; the phthisical 140 lbs. is the weight of emaciation, —a wreck weight; there is a thin arm and thigh, and the patient probably exclaims, "I have fallen away to nothing;" but not so in the healthy 140 lbs. weight. The two weights are never likely to be confounded; the one is natural, the other is unnatural; one the usual weight, the other the emaciated weight.

We give a table of the healthy weights for each height; yet, as a general rule, the *usual* weight is to be considered as the healthy weight, and a diminution below this may be considered as "*loss of weight,*" and an excess above it, "*gain of weight,*" though such may differ from the mean weight of our table; that which is so true in general, is yet found to be fallacious in particulars.

Table of Weight.—2976 Healthy Males; 710 Phthisical Males; and 290 Phthisical Females, at about the middle period of Life.

Heights.				Males. Healthy.		Males. (Phthisis.) Diseased.		Females. (Phthisis.) Diseased.	
Ft.	In.		Ft. In.	lbs.	No. Cases.	lbs.	No. Cases.	lbs.	No. Cases.
0	0	to	4 6	...	.....	62	3	*96	6
4	9	,,	4 10	...	.....	90	8	91	15
4	10	,,	4 11	...	.....	...	0	96	22
4	11	,,	5 0	...	.....	90	12	99	52
5	0	,,	5 1	120	17	102	3	100	32
5	1	,,	5 2	126	36	99	22	101	44
5	2	,,	5 3	133	43	104	29	108	38
5	3	,,	5 4	139	88	106	44	106	27
5	4	,,	5 5	142	126	111	64	109	17
5	5	,,	5 6	145	215	103	104	101	20
5	6	,,	5 7	148	317	118	116	123	7
5	7	,,	5 8	155	379	124	99	119	4
5	8	,,	5 9	162	468	126	73	81	2
5	9	,,	5 10	169	368	126	57	104	2
5	10	,,	5 11	174	348	130	32	119	2
5	11	,,	6 0	178	245	138	19	...	0
6	0	,,	6 *	218	326	143	15	...	0
Total				155	2,976	111	710	104	290

* Mean weight, at 4 8 to 4 9.

From this table, we first notice a strong difference between the healthy and diseased weights. Taking the mean of the healthy weights at 155 lbs., that of the male consumptive subject is 111 lbs., and of the female, 104 lbs.; or, joining the male and female phthisical cases together, they differ by weight as 107 to 155 of the healthy,—a difference sufficiently broad to show the effect of this disease upon the constitution, by an average loss of 38 lbs. Hence the patient confidently exclaims, "I *have* lost weight."

We have noticed, that the phthisical weight sometimes is the same, or heavier than the healthy weight, yet easily distinguishable as the weight of emaciation. We give a few cases in the following table:—

TABLE OF PHTHISICAL WEIGHTS, APPARENTLY GOOD UNTIL COMPARED WITH THE FORMER WEIGHT.

	Present Weight. PHTHISIS.	Former Weight. HEALTH.
Ft. In.	lbs.	lbs.
5 4	98	154
5 5	112	154
,, ,,	115	145
,, ,,	149	156
,, ,,	145	158
5 6	150	168
,, ,,	140	151

(a) See Med. Chir. Transactions, Vol. XXIX., p. 166, and Cyclopædia of Anatomy and Physiology, Article "Thorax," p. 1074.

	Present Weight. PHTHISIS.	Former Weight. HEALTH.
Ft. In.	lbs.	lbs.
,, ,,	138	154
,, ,,	123	182
5 7	140	168
,, ,,	156	182
,, ,,	154	168
5 8	167	175
,, ,,	146	182
5 9	160	196
,, ,,	164	177
,, ,,	152	172
5 10	161	176
,, ,,	154	175
5 11	156	188
6 0	167	182
Mean .	145	171

Although the phthisical weights are apparently good, yet, when compared with the former weights, they are as 145 to 171, a difference of 26 lbs.; so that, when the phthisical weights are high, the usual weight has been *higher*. It is wonderful to contemplate to what an extent phthisis can rob the body of matter: one man fell from 168 lbs. to 89lbs.; and Freeman, the American giant, from 271 lbs. to 141 lbs., nearly 50 per cent., and shrank nearly four inches in stature! Such is the effect of phthisis pulmonalis. In fact, the great feature of this disease is LOSS OF WEIGHT. All other abnormal conditions are but secondary to this; and, if our patient has not lost weight, we have no right to say that consumption is present. We have not seen an exception to this in 1000 cases. The scales are, therefore, the most important instrument for diagnosing in this disease. We dare not pronounce any improvement, or otherwise, until the patient has been weighed, and this compared with a former weight; then, according to the increase, whatever be the other conditions,—as cracklings, gurglings, metallic tinkling, or hæmoptysis,—it matters not; the weight only is our guide in prognosis, and we accommodate all conditions to this, when the case is improving. Again, if a patient is losing weight, it matters little what we *hear* or *see*,—the case is *not* improving. The time in which the body becomes so thinned down varies from two to twelve months, and, on an average, we may say, of from five to six months.

Milton-street, Dorset-square, August, 1850.

[To be continued.]

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

LITHOTOMY.

ON Saturday, July 27, Mr. Lawrence performed the lateral operation of lithotomy, the patient having been first rendered insensible to pain by the administration of chloroform. The incisions having been completed, and the forceps introduced into the bladder, two roundish calculi, composed of lithate of ammonia, were extracted. Upon sponging away the blood, it was seen that a superficial artery, of larger size than usual, was bleeding freely: it was secured by a ligature and the patient was removed to bed. There have ensued since no unfavourable symptoms to retard recovery. He is free from pain and sleeps well; the urine flows freely through the wound, but is day by day returning in larger quantity to its natural channel.

It is no easy matter to divide, by a section made in the perinæum, the trunk of the internal pudic artery, either in the dead or the living. At the tuberosity of the ischium, where such an occurrence would be most probable, the vessel lies at a distance of full two inches from the integument, and an inch and a half above the lower border of the bone. But varieties in the course and distribution of the branches of the internal pudic artery, or in the source from whence the penis derives its blood, occur so often, that it is a matter of surprise that hæmorrhage is not more common than we find it after the lateral operation of lithotomy.

In November, 1849, I met with the following variety in the dissecting rooms of the hospital. The trunk of the internal pudic artery left the cover of the ischium about an inch from the lowest point of its tuberosity, and then gave off—1, A large superficial perineal artery, which, winding over the transversus perinei muscle, pursued its course between the bulb and the crus penis; 2, The artery of the bulb, which came off just above the transversus perinei muscle, and ascended obliquely to the point of its distribution: both these vessels must have been divided in the lateral operation. In the course of the same session there was an instance of the transverse perineal artery, and the artery of the bulb, both of large size, arising just above the tranversus perinei muscle by a common trunk; a second artery of the bulb, of small size, came off in the usual situation.

The internal pudic artery may terminate in the artery of the corpus cavernosum; the dorsal artery of the penis giving off, and an artery of the bulb will then come from the internal iliac. Pursuing its course along the side of the rectum and prostate, it emerges from under the arch of the pubes, and is distributed to the integuments and to the glans penis. It was this anomaly which gave rise to a fatal bleeding in a case operated upon in London some years ago. It should be remembered—1. That the superficial perineal artery may be of very considerable size, and arise by a common trunk with two or three neighbouring vessels. 2. The artery of the bulb leaves the trunk of the internal pudic artery at a very uncertain point. 3. There may be two arteries of the bulb, a superior and an inferior. 4. The trunk of the internal pudic artery may leave the cover of the bone a very short distance from the tuberosity of the ischium; and 5. The dorsal artery of the penis may be a long branch of the internal iliac, and run by the side of the rectum and prostate. The frequency of these irregularities, which would place some of the vessels directly in the line of incision, leads me to think that the division of one or more of them is an occurrence more frequent than is supposed; but that it is not usually attended by serious consequences. It once occurred to me to dissect a perinæum in which there was no internal pudic artery; neither that vessel which runs along the ramus of the ischium, nor the branch from the internal iliac which sometimes partially supplies its place. The corpus cavernosum of that side was nourished by a branch of the internal iliac; the arteries of the bulb and of the dorsum penis were derived from the vessels of the opposite side, which were consequently of larger size than usual. In any case, therefore, where active hæmorrhage ensues after the operation, bystanders should be slow in concluding that the incisions have been improperly made. Any such a remark would convict him who uttered it of being not very conversant with the anatomy of the perinæum. H. C.

GUY'S HOSPITAL.

BY DR. CHARLES KIDD.

RHEUMATIC PERICARDITIS—RECOVERY.

THE very great frequency of pericarditis in practice, explained, perhaps, by the regularity with which we now look for it in rheumatism, in renal and other diseases, the comparative ease with which pericarditis is detected, and the very essential manner in which it modifies treatment in these diseases, will be sufficient excuse for entering on so apparently new a subject. Within the last year, I think I am right in saying, the views of practitioners, too, have changed a good deal as to the nature and treatment of this disease, which it will be interesting to find our further experience corroborating.

Few diseases are more obscure in their origin—few more insidious and dangerous if neglected. The very essential nature of the organ engaged explains this, as well as the very general constitutional disturbance that always accompanies the affection. In rheumatic pericarditis, we have, possibly, two separate conditions of the system to contend against: one, a coagulable condition of the blood, in which the fibrine becomes increased in quantity, and is merely held

in solution in the serum; the other, a state of actual arthritis, or acute inflammation of the joints, seldom or never going on to effusion or suppuration. An old opinion, coming again to the light, would ascribe the disease to a *materies morbi* in the blood, of which we know little, but that, as this fibrine increases in the blood in rheumatism, the blood corpuscles decrease, the fatty matters of the blood also increasing; that a development of lactic acid takes place at the same time in Prout's secondary assimilative process, always evinced in the deposits of the urine, in the perspiration, &c. Whether all these changes are sufficient to account for the great constitutional disturbance of rheumatism, or are merely links of a chain, beginning in a profound disturbance of the organic nervous system, and conveyed to the vascular system, and of course to the blood, may, perhaps, be still open to speculation. That a powerful impression by chills or cold on the nervous system, however, is the starting point of the disease in many cases, there can be no doubt. The disease is very common among the poor from this cause,—damp and cold, externally, preventing the generation of animal heat so connected with the proper functional activity of the organic system of nerves, influenced also and aggravated by atmospheric influences. The several complications we meet with depend, possibly, on pre-existing lesion, or disorders of the particular organs engaged; that of pericarditis, on some specific connexion between rheumatic inflammation of fibrous tissues, and the membrane surrounding the heart, which we cannot yet exactly explain.

The number of cases of pericarditis, in connexion with rheumatism, to be met in large hospitals like Guy's and St. Thomas's, must be familiar to the reader. Of course, the case following in this report, (selected out of many others,) under the assiduous care of Dr. Barlow, cannot pretend to much novelty; yet, as exhibiting the more improved treatment at present used, and the general manageableness of such cases, it cannot fail to be of interest.

The treatment of pericarditis has recently undergone considerable modification. Taking blood by venesection, which would first suggest itself, though necessary in some cases, in others is all but inadmissible. It has been recently shown by Bouchardat that rheumatism may even be induced by the coagulable state of the blood, the result of repeated bleedings. Every particular case, of course, will require a different line of action. Venesection after the middle of the first week, as a general rule, will lengthen the period of recovery, and many cases will not require bleeding at all.

The local abstraction of blood in rheumatic pericarditis will be always found that most beneficial. The treatment must vary, as we have to treat patients ill-fed and etiolated in cities, or healthy and full of red blood in the country. Antimony, alkalies, nitre, and colchicum, are very valuable. The exhibition of mercury has been lately dwelt upon, the general impression being that its beneficial effect will, in a great measure, depend on the period at which it is given. If early in the disease it will prove much more satisfactory than later, its action being more properly directed to prevent the deposition of organisable matter in the pericardium than to remove it afterwards. Indeed, our late statistics would go to prove that salivation has no very marked effect on the disease at all, the ceasing of the friction sound, according to Taylor, being more of a coincidence than really brought about through the agency of the mineral. As to the use of tartar emetic to remove inflammation, perhaps there is no difference of opinion; the dangerous effects of this valuable medicine having little or no existence except in the estimate of those who have not studied its effects. The following case I have watched for some days, and illustrates several points:—

Margaret B., aged 20, was admitted into Guy's, June 17th, 1850. She is single; lives in Downham-road, Islington. As well as her history can be gathered, she is a servant, has enjoyed good health till the last twelve months, suffered formerly from rheumatism, and lately very much from debility and irregular menstruation; complains at present of burning hot pains in wrists, elbows, and knees; her ankles also are very much swollen and hot; her countenance has a peculiar anxious appearance; the number of respirations is increased; the pulse is above 100, *full* but compressible; her head seems free; she complains, however, of loss of appetite; is excessively thirsty; her tongue is moist,—whitish, with a cream-like fur; the respiratory murmur, I should have said, is quite natural all through the chest; the gastric symptoms, her chief annoyance, are much more severe; and the dreadful pain of the joints.

On passing the stethoscope over the chest, the heart's action is found to be quite natural; the impulse is normal too; a very feeble bruit is perceptible with the first sound, particularly over the valves; not traceable at all along the aorta; the second sound seems free. She was ordered that night pills with antim. tart. and calomel, and a draught for the morning, with senna and vin. colchici, to be kept very quiet, and to get simple drinks; no food.

18th.—To-day Dr. Barlow saw her; corroborated the previous account; the bruit not at all lessened; if anything, indeed, it is a shade more marked than yesterday; the medicines ordered to be repeated; a mixture with nitras potassæ during the day; her diet to be low, and to go on as before.

19th.—Feels much the same, still very feverish; the pulse up to 108; all the other symptoms as yesterday; ordered a draught every four hours, consisting of aq. acet. ammoniæ, mist. camphoræ, nitras potassæ, and vin. opii.

20th.—Feels an acute pain below and to the right of left nipple, between the fifth and sixth ribs, increased on inspiration or pressure; there is also distinct "rubbing sound" with the systole, when you examine carefully, occasionally of a peculiar "to and fro" character, as it is called; the tongue is still foul; there is much feverishness; the pulse is still holding up to 108; cupping glasses were put on, and ʒvj. of blood drawn from the cardiac region; (this is all the blood that has been taken during the attack;) to continue her drinks; the calomel and the mixture were also repeated.

21st.—Complains that she has had a restless night; pain, however, is not so troublesome in the side, and on the whole she feels better; the rubbing sound is singularly well marked. Repet. med.

22nd.—Feels quite another person to-day; she is much relieved; no pain in the joints; the tongue also is clear; the "rubbing sound" over the heart still continues; the indications of pericarditis, in fact, could not be better marked.

23rd.—Has had a restless night, but still in every other way improving. Pergat.

25th.—Tolerable night; tongue again furred; "rubbing sound" continues.

26th.—Complains of "soreness" in the joints; not so well in her general feeling; bowels relaxed to-day; tongue furred; "rubbing sound" little if anything diminished; seems as if she had taken something not fit for her, but denies that she has done so.

27.—Better. Her respiration less laboured, and her general inflammatory condition, as evinced by her face, altogether altered.

28th.—Still improving. Bruit is now traceable up along the aorta. Ordered a blister to the region of the heart, and to go on with the last medicines.

July 1.—Since last report has been going on favourably. *The friction sound has quite disappeared.* Her other symptoms also improved.

5th.—Has had some little relapse; not so well to-day. Some general directions given, as she has been making too free. Pericardium all right.

8th.—Much better than at last report. The gums are sore.

17th.—All signs of the inflammatory condition of the pericardium have disappeared. Feels quite well.

23rd.—Going out perfectly recovered.

We have here, then, well-marked pericarditis and rheumatism, both got under by the judicious care and management observed. It is not speculating, perhaps, too widely of our present purpose to say, if this young woman had been treated by any of the heroic plans of treatment formerly in vogue, she would be still a patient in a debilitated state in hospital. The practical fact for our consideration is, that bleeding lengthens out the period of recovery, and if not used early, so as to counteract the inflammation at its commencement, its use afterwards becomes more and more doubtful. The experience of different practitioners will, of course, differ with respect to this remedy and mercury, but a good deal may be explained by the character of the different patients under observation,—whether stout and well fed in the country, or, as is unhappily too often the case, ill fed and badly nourished in cities,—the safer rule, at least in cities, is not to debilitate further if it can be by possibility avoided.

Pericarditis, under any mode of treatment, I need scarcely remark, is a very dangerous disease; the mere effusion may,

by its pressure, so embarrass the heart as to bring on fatal consequences. Again, it may produce the most opposite results as regards this organ; atrophy, from pressure; hypertrophy and cartilaginous hardening of the walls of this viscus, and even fatal softening. When pericarditis does not end in resolution, the next best thing is, possibly, adhesion of the opposite surfaces of the pericardium: this, also, is a very serious change in the organ. The constant association of endocarditis with inflammation of the pericardium explains, also, many of those organic diseases so fatal and so trying to the ingenuity of the practitioner. For all these reasons, indeed, pericarditis is a disease that cannot be too deeply studied, and that should not be allowed to go on one day longer than can possibly be helped. In renal diseases, and in rheumatism, we should always look out for it. Pericarditis is much commoner in children than generally suspected; no doubt laying the groundwork of those multitudinous cases of organic disease of the heart met with in after life. One of our pervading errors, perhaps, has been to look on rheumatism as a mere local disease, and pericarditis a metastasis. Nothing can be more erroneous. Rheumatism is a strictly constitutional disease, and this very serious disease of the pericardium an integral portion of it, perhaps, from the beginning.

WESTMINSTER HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S.L.

CUTANEOUS CANCER OF THE ANKLE—AMPUTATION OF THE LEG, UNDER MR. BARNARD HOLT.

The irresistible progress of the disease in this case, in spite of all treatment, offers us an example of the obstinacy with which it will fix itself in the system, and shows us that much remains to be done before we can hope to lay aside the knife, or dispense with the chloroform. The patient, an interesting girl, aged 24, states, that about fifteen or sixteen years ago, she suffered from a tumour about the size of a marble on the right foot under the inner ankle, for which she was placed under the care of Mr. Liston, in the North London Hospital, and that this surgeon removed the tumour. What opinions he may have had regarding the disease, or whether he had any suspicions of its being malignant, it is now impossible to ascertain. He certainly never communicated them to the girl, and simply spoke of it as "a tumour," and maintained the certainty of her obtaining complete relief from the operation. The seat of the operation healed up, and she left the hospital apparently cured; but the cicatrix, instead of becoming white and firm, was always covered with a thin, dry scab, which she picked off from time to time. For a long time it remained in this state; but, about four years ago, a second tumour, of pretty much the same colour as the surrounding skin, began to form a little above the cicatrix, and gradually increased in size. This she poulticed frequently, and about two years ago it burst in the middle of the night, and some matter was discharged; but no subsidence of the swelling following, she still poulticed it, and applied some ointment, recommended by a surgeon, which gave her great pain and afforded no relief. About six months ago, no improvement being visible, the surgeon, under whose hands she was, requested the aid of Mr. Holt, who removed the tumour,—by this time grown to the size of a walnut,—within a few days after.

But it soon began to manifest greater activity, and to display its malignant and dangerous nature. The granulations, instead of being small and healthy, increased in size, and though attempts were made to destroy them by means of escharotics, they still grew larger, and a cherry-coloured nodulated mass arose as large as an egg: in washing it she constantly removed small, black coagula. Yet up to a late period she was able to walk; she could not bear a boot to be laced on the ankle, and setting the foot to the ground when she rose to begin walking was very painful, but this over, she could go pretty well. As there appeared no probability of saving the foot, she was made an in-patient on the 7th of May, and on the 23rd of June Mr. Holt removed the leg between the upper and middle thirds. On examination the disease was found to be confined almost entirely to the skin, having attacked none of the deeper seated tissues, except the adductor pollicis.

Since the operation she has gone on well; a gland has suppurated at the inner and upper part of the thigh, but, with this exception, she has had no untoward symptom. She thinks herself much better, for though she had not much pain for a long time, yet latterly her sufferings began to increase rapidly; and what may in some degree add to this is, that she seems to have had a deep-rooted conviction that nothing would do her good but operation.

CHIMNEY-SWEEPS' CANCER.

This disease, singular in its pathology, and uniform in its appearance and progress, easily recognised, and apparently, to a certain extent, not very well accounted for, is perhaps seen to a greater extent in the hospitals of London than in any other institutions in the world. It is generally supposed to proceed from the soot irritating the scrotum, but it is stated to have been seen in persons who had not been exposed to the influence of this agent; and, again, it is not found in Edinburgh and other parts of Scotland, where the sweeps are exposed, in the same way, to the action of the soot, (though, perhaps, of another kind of coal.) It is not owing to dirt on the scrotum, for the disease is unknown in Paris, though the lower order of Parisians are infinitely dirtier in their persons than the same class in London or Edinburgh; and, like bakers' itch, is said to have occurred in persons who have been, in early life, subjected to the action of the irritating material, and again removed for many years from the sphere of its operation. In the following case, however, the patient had most certainly been fairly exposed to the action of the soot, for he began chimney-sweeping when he was only eight or nine years old, and, as he is now 29, has been nearly three-fourths of his life in this vocation.

The disease, he states, first appeared like a small pimple, the top of which he repeatedly scratched off; by-and-by a little fluid oozed from the abraded surfaces, which gradually increased in extent till about four months ago. At this time its development seems to have received a sudden impulse, and it speedily increased in size. He began to dress it with poultices, which produced free suppuration, and gave him great relief. He never applied to any one for advice, so that the progress of the disease was quite uninfluenced by any foreign applications. He was admitted into the hospital, under Mr. Holt, on the 2nd of July, the growth having, by this time, attained the size of the tips of three fingers, and become very painful; the pain was of a lancinating character, and accompanied by beatings which gave him the sensation of the ticking of a clock.

As his health had now suffered considerably, he was operated on four days after admission, the incisions being made transversely. Some hæmorrhage took place on the 8th, which impeded the progress of union by the first intention, but, by the 20th, the cicatrix had formed firmly, except over a minute line; the case may, therefore, be considered as having terminated favourably, though only a long period of time can assure us that there is no danger of relapse. The patient, however, leaves the hospital in a most gratifying state of improvement.

Respecting the mode of growth by which the scrotum is replaced there seems some obscurity. Mr. Liston says "it is astonishing how completely and in how short a time these glands (the testicles) receive a new covering at the expense of the surrounding healthy skin." The fact is well known, but we have not been able to meet with any very satisfactory account of the manner in which it occurs. In cases like that we have just recorded, where a small portion of the scrotum is removed, it is easy to imagine how this structure, loose and extensile, may be greatly stretched by the pull of the ligatures; but there are facts which tend to show, that independent of this the scrotum would of itself cover the testicles. Mr. Lynn on one occasion removed the whole of the scrotum, and yet the testicles were soon covered. In his wards there is now a man whose testicles were denuded by sloughing of a large portion of the scrotum, the consequence of exposure to cold and want. A short time ago, when we first saw this man, the testicles were exposed; three weeks after the edges of the scrotum had approximated within a very short distance of each other, though no mechanical means had been used to bring them together, the part having been only dressed with poultices, and now the superior portion of the scrotum has advanced downwards so far over the testicles that the lesion is only seen by looking over the projection formed by the lower end of it. May it

not, then, be rather some remnant of that organic attraction which unites the two portions of the embryo at the mesial line, that performs this useful service, and thus remedies the loss of large portions of this membrane by disease or operation?

CONTINUATION OF MR. LYNN'S CASE OF MELANOSIS.

DEATH.—POST-MORTEM EXAMINATION.

We are sorry to have to record the unfortunate termination of this case. Until the 6th July the patient progressed favourably; granulations were forming at the base of the optic cavity, and the extremity of the optic nerve was beginning to shrink. On this day the patient was attacked with diarrhœa, under which he rapidly sank, and expired on the evening of the 9th.

Post-mortem examination revealed extensive melanosis of the liver, but of no other organ. Over the surface of this were scattered numerous melanotic deposits, varying in size from that of a small pea to that of a filbert. They were firm, and distinct from the surrounding tissues; but the small transparent capsules, which in many cases invest them, were here absent, or not visible to the naked eye. These deposits, when cut open, were black, and seemed homogeneous, like small very dark coagula. On the superior surface of the liver, on the right lobe, close to the falx on one side, and to the posterior margin of the liver on the other, was a mass of this kind as large as a small apple,—perhaps as great a size as it ever attains in the human subject.

This, therefore, may fairly be considered a case of tuberiform non-encysted melanosis, invading the eye, destroying vision there, but having its principal seat in the liver, and so materially interfering with the nutrition of the frame that the patient sank in three days from diarrhœa. A calm survey of the facts of the case, and of the nature of the disease, throw open the question, whether melanosis might not be removed from the class of cancers with which it is generally associated, and rather transferred to that of diseases of the nutritive functions, as chlorosis, phthisis, splenitis, &c. All the symptoms which attend it—the cachexy, emaciation, the earthy cast of countenance, loss of strength, the deposit of the dark matter—point to a decay of the blood, to a state incompatible with the due nutrition of the body, and yet differing widely from the state of the frame in cancer and fungus hæmatodes.

It is an unfortunate circumstance that this man was cut off by diarrhœa.

1stly. Because everything at first promised a favourable termination.

2ndly. Because an eye affected with melanosis has been removed with complete success; nay, a case is given in the last Number of the "Provincial, Medical, and Surgical Journal," where a similar operation was performed more than twenty years ago, and the subject of which is now alive and well.

3rdly. The operation was performed for a disease for which there is no other remedy than the knife; for the most opposite modes of treatment have alike failed in arresting or alleviating it.

Poisoning by the Chloruret of Zinc.—Some short time since, in our reports of the Royal Medical and Chirurgical Society, we published the particulars of a fatal case of poisoning by Burnett's disinfecting fluid. The mother of the child has since been tried for its murder, and acquitted. It was stated in court that this was the first instance in which death had followed the internal use of the drug. The newspaper report speaks throughout of the oxide of zinc constituting the lethal dose. That must be an error; for the oxide is insoluble, and cannot therefore be injurious. If the chloruret in the solution, when taken internally, could be reduced to the state of oxide, it would probably become innocuous.

The Veterinary Profession.—At a recent meeting of the Common Council of the City of London, it was proposed that the future inspector of live cattle in Smithfield-market, to be appointed by the Lord Mayor, should be a veterinary surgeon, or some other person qualified to give a professional opinion as to the sanitary condition of the cattle. We congratulate the veterinary profession on this just recognition by the civic authorities of their claims to an appointment which will, no doubt, be a remunerative one.

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THE MEDICAL TIMES.

SATURDAY, AUGUST 10.

THE NEW BILL FOR MEDICAL REFORM.

In another part of our journal will be found an abstract of the Bill nominally prepared by Mr. Wyld and Colonel Thompson, but which, it is well known, really embodies the opinions of the Council of the National Institute.

From the present position of the medical reform question—the relation in which the Institute stands to the corporate bodies, and to the Government—this Bill, it appears to us, must be regarded as the ultimatum of the Association from which it emanates.

No Bill on the subject of medical reform can become law without the support of the Minister for the Home Department. Sir George Grey has declared that the parties interested must agree among themselves ere he will aid in adjusting the question. If, therefore, the Bill before us is one in support of which all the interested corporate bodies, especially the College of Surgeons and the College of Physicians, cannot combine, its rejection by the Commons is inevitable, and the labour bestowed on its concoction will necessarily prove to be labour spent in vain.

That a Bill, by which the present princely revenue of the College of Surgeons—a College, the peculiar trait in whose character is love of cash—would be reduced to some few hundreds per annum, should become law with the consent of the spoliated body, is what even the framers of this Bill could never have believed. Yet the Minister declares the consent of the College the *sine quâ non* of his support.

Again, the College of Physicians must be a consenting party; and can it be hoped that they will be content for a new *Royal* College to be established to examine in medicine?

Without worldly wealth, near even to bankruptcy, the College regards every attempt to infringe on its titular dignity with that sensitiveness which is a feature of man at once proud and poor. They are not, indeed, rich, nay, they are very poor, but then, they are *a*,—yea, more, they are *the only*—Royal College empowered to examine in medicine; and will this body corporate agree, that their little all shall be taken from them? Never. Mind reader, we are not entering *now* on the question of abstract right, of what would be best for the profession, or for the public weal, but on the question of possibility. The Bill, then, may be regarded as defunct, ere it is fairly born.

But supposing, by some stretch of the imagination, the opposition of the present corporate bodies withdrawn, the

avarice of the one college appeased, and the pride of the other conciliated; or the minister to be animated for a little while by a simple desire to do what is right, without regard to corporate privilege,—the latter, we fear, requiring a still greater stretch of the imagination than the former,—would it be desirable that the Bill, as it now stands, should become law?

The College to be established by this Bill would open its portals to all those who, having undergone a prescribed course of study, and been registered annually during the period of their studentship, should finally submit to an examination in medicine, surgery, and midwifery, conducted by men chosen without limitation by the Council. So far no doubt can be entertained of the abstract desirability of the plan; but in order, it would appear, to conciliate the sister kingdoms, and prevent opposition from the London University, all doctors and bachelors in medicine, all those examined by other licensing bodies, are to be admitted to practise without further examination. Now, this is virtually conceding to the Edinburgh, Glasgow, and St. Andrew's Universities the right to license to practise, as well as to grant degrees,—a proceeding injurious to the profession, and manifestly unjust to a large section of it.

Edinburgh, with its "one pure surgeon," and its one infirmary, has not the means of efficiently educating the whole body of the profession. The resources of Glasgow, Aberdeen, and St. Andrew's, as schools of medicine, are beneath notice; of them we need not speak.

Surgeon-apothecary would be the title gained by submitting to the curriculum imposed, and to the examination enforced, by the Royal College of medicine, surgery, and midwifery,—that of doctor in medicine at a lower cost, pecuniary and mental, by study in Scotland. Equal political privileges would be enjoyed by the doctor in medicine and the surgeon-apothecary.

It is evident, moreover, that the attempt to equalize the severity of the examinations of all the licensing bodies in the kingdom is mere moonshine. It would practically be as impossible to refuse admission to the graduate of St. Andrews as of Edinburgh, provided only, as at the present time, the examinations of the former were not *notoriously* defective. The student would quickly discover which was the least strict examination. The Council of the New College would have great difficulty in proving its laxness.

The more we reflect on the subject, the more satisfied we are that there ought to be only one body empowered to grant a license to practise, and that the body so empowered should grant its license only to those who have submitted to an examination before those it might appoint. Let the one body, if deemed advisable, nominate examiners for Scotland and Ireland; but then let the examiners be independent of every teaching College and every University. Let Scotch professors or practitioners form part of the English board; let English professors or practitioners form part of the Scotch board. The facilities of communication are now too great for distance to be an argument against this arrangement. If the examination for the Scotch degree be of a high character, then the graduates need fear no second and minor trial. If the degree be obtainable without a strict examination then let those who are unable to pass the examination required by the State be, as they ought to be, rejected. The money part of the question is met by the Bill before us, for Scotch and English graduates are required to pay for the support of the new College, although they are not examined by it.

Of the two great features, then, of this Bill,—namely, the establishment of a Royal College of Medicine, Surgery, and Midwifery, and the admission of *all* M.D.s, M.B.s. &c., without examination, to equal privileges with those who have submitted to the *curriculum* and examinations of the proposed Royal College,—we would say the first is impracticable, and the second undesirable; and of the whole scheme we affirm that it would, if carried out as at present proposed, pauperize the College of Surgeons, insult the College of Physicians, close the schools of medicine in London, and, finally, what is of far more consideration to the public than all others, render the general practitioner a less highly educated man than he is even under the defective constitution of the existing Licensing Boards.

NON-PUNISHMENT UNDER THE PLEA OF INSANITY.

ANOTHER STATE OFFENDER.—THE MAD ARTIST.

The "plea of insanity," as it is now familiarly called, or in other words, that new-fangled mode of philosophising which releases a man from the responsibility of his social offences, however light or however grave they may be, is, we are happy to observe, not likely to be legitimatised in our judicial courts. The judges of the land appear determined to protect the interests of society by weighing facts in the scales of Justice, rather than shadowy psychological speculations; and jurymen, while they listen with becoming gravity to the mystifications of scientific jargon, evince a praiseworthy pertinacity in adhering to the instinctive principles of common sense. The mad plea, however, we are aware, was beginning to make some progress among us. It had already appropriated to itself a peculiar species of medico-legal phraseology; it was moulding itself into a systematic form of exculpatory evidence, which, ere long, would have demanded a separate chapter in the text-books of our common law; nay, several physicians connected with lunatic asylums had succeeded in getting off some remarkable criminals, and were acquiring a reputation for being cognizant of those peculiar forms of "mental disease" under which crime becomes only a pathological phenomenon, to punish which would be the height of barbarity. We live in a wonderfully enlightened and humane age. Boys must no longer be whipped for robbing orchards, nor men hanged for committing murder. In the days of the good old Newgate Calendar, what would not highway-robbers, house-breakers, and street-thieves, have given for this loop-hole plea of insanity, which now ingeniously provides a chance for the escape of such criminals within the very noose of the gallows? In those unsophisticated times, judges were presumed to, and in reality did, "look quite through the deeds of men;" they weighed the nature and the consequences of evil actions, and never dreamed of investigating the anatomy and pathology of the culprit's wits; but now-a-days the psychological sun has risen above the moral horizon, and some doctors have become so marvellously clear-sighted, that they can see clearly through the mysteries of the human mind, and detect the latent springs of all its erratic manifestations. In the case of Robert Pate, his mental faculties were observed to be most of them as rightly adjusted as the lenses within the tube of a Herschell's telescope; but, unhappily, one or two of them were said to be a little awry, which accounts clearly for his outrage upon Her Majesty; for these having angular conditions threw a kaleidoscope-like tinge over his other faculties, which gave rise to obscure and irresistible impulses, that hurried him onwards by a curious kind of *vis-a-tergo* into all sorts of eccentricities and rash actions, for all which it is clear he ought not to be held in the least degree responsible. This new principle in criminal philosophy had already

been recognised on many great occasions; and it was certainly somewhat hard that it did not avail in the case of Robert Pate, notwithstanding the exertions of his eminent and able counsel, and the evidence of Drs. Monro and Conolly in his behalf. On a future occasion we shall return to this subject, as it is one of great medico-legal importance, but we are at present "*not i' the vein*" for another State offender is here brought before us, and he, too, sets up the plea of insanity in defence of his untoward misconduct.

The case is as follows:—Edwin Bates, described as an artist, (we abridge the report from the *Times*, July 25,) was charged at the Police Office, Bow-street, before Mr. Jardine, with sending threatening letters to His Royal Highness Prince Albert, with the view of extorting money. Mr. Raven, from the office of the Treasury, conducted the prosecution. The Honourable Colonel Grey, Equerry to the Queen, produced a number of letters, the contents of which pressed urgent claims upon the purse of the Prince for what the writer called "Subscriptions," to indemnify him for his alleged railway losses; and some of the expressions they contained implied the intention of doing personal injury to the Prince unless these importunities were complied with. The Court having examined the letters, caused them to be handed over to the prisoner, who at once acknowledged them to be in his handwriting, and then proceeded with his defence, which shows, in a very amusing and instructive manner how the humblest culprit may, under any emergency, avail himself of the plea of Insanity. The prisoner commenced by stating, that His Royal Highness had not acted unkindly towards him;—he had applied to him for money, as he had done to other noblemen and gentlemen who had complied with his solicitations, several of whose names he mentioned with gratitude. He then, in the following language, pleaded for a mitigation of sentence:—"*If*," said Edwin Bates, "*you make an example of me, you will deprive me of all the subscriptions. I hope your worship will consider the state of my mind at the time of my writing these letters, and put a favourable construction upon them. For I can assure you I have no hostile feelings towards the Royal Family, and they have none towards me.*" [Impudent knave!] "*You have only to send for Dr. Monro to learn the state of my mind. When I was tried for felony thirteen years ago I was considered insane. I do not wish to speak of my own weakness;*"—[marvellous delicacy!] —"*but it is well known I am not right in my mind.*" The Court did not—*Proh pudor!*—send for Dr. Monro, or any other Doctor, which perhaps the Magistrate ought to have done, to examine into the prisoner's state of mind; and, upon its being intimated by the Solicitor for the prosecution that the Government did not wish to press for punishment, but only to have the repetition of the annoyance prevented, the self-accused mad artist was bound over to keep the peace towards His Royal Highness Prince Albert and the public generally for twelve months, himself in the recognizance of 200*l.*, and in two sureties of 150*l.* each; in default of which the prisoner was unceremoniously locked up, just as if the object of his ambition had been obtained, and he had already been consigned into one of the padded rooms at Hanwell.

We doubt if the wit of Smollett or Fielding, or the fertile humour of our very clever moral satirists, Dickens or Thackeray, could have devised a story so well calculated to expose the absurdity of allowing the plea of insanity to be set up as a security against the punishment of rogues and vagabonds. We have here an old offender, once, according to his own account, indicted for felony, carrying on the old craft of mendicant letter writing, interlarding his appeal with various threats and menaces, and, when taken up and brought before the bar of a police court, charged with the offence, he assures the magistrate that he is not in his "right mind;" yet was he rational enough to concoct his epistolary appeals with sufficient tact and ingenuity to impose upon the benevolence of many kind-hearted persons. He is also sane enough to appreciate the value of his ill-earned money, and so exclaims, "Don't make an example of me, your worship; for if you do, I shall lose the subscriptions I am getting. I am, indeed, quite wrong in my head." We have no doubt Edwin Bates, who wishes us to believe he is a mad artist, is well versed in the lives of criminal lunatics, and that he has read with much edification the adventures of Oxford, M'Naughten, and Captain Johnstone; he has also, doubtless, studied the philosophical principles of irresponsible moral actions, consequent upon mental pathology, which Dr. Conolly on all occasions endeavours to demonstrate to the satisfaction of our learned Judges. His defence, however, very properly failed him, and he has only to thank the humanity of Prince Albert for having escaped for a while a little healthy pedestrian exercise upon the treadwheel.

TESTIMONIAL TO DR. CONOLLY.

We have much satisfaction in calling the attention of the profession to a series of resolutions, adopted at a meeting held on the 3rd inst., to present Dr. Conolly with a public testimonial "commemorative of his invaluable and most successful labours in ameliorating the treatment of the insane." With his usual alacrity in doing kind offices, Lord Ashley, who has contributed a large portion of his well-spent life to this important subject, presided on the occasion, and Dr. Conolly has reason to feel gratified with the unanimity—we may say cordiality—with which the proposition was received. In the medical profession, public honours are rarely awarded to the services of public men; when, therefore, such exceptional cases as the present do occur, medical men should, upon principle, support the recognition of superior merit. It is true, that the "non-restraint system," as it is called, did not originate with Dr. Conolly, for when he became attached to Hanwell it had already been introduced in Lincoln Asylum, and in the Retreat near York. The padded room, too, had been devised by Autenreith; but it remained for Dr. Conolly to carry out the practice, already suggested, upon a scale sufficiently large to satisfy the profession of its feasibility.

But we do not consider that Dr. Conolly's claim to the proposed honour should rest upon his having so strenuously advocated and so unreservedly adopted the non-restraint system; he has other and higher claims upon our consideration. He has devoted himself with unremitting zeal to this branch of medical science, and many of the works he has published will remain standard authorities. He has aimed at and succeeded in improving generally the medical as well as the moral treatment of the insane. Who, indeed, has more eloquently denounced than he has done the unnecessary confinement of persons accused of lunacy who are, nevertheless, capable of harmlessly enjoying their personal liberty? Who has cautioned the public more emphatically against the abuses which formerly prevailed to an immense extent in private lunatic asylums, and which are now, for the most part, happily abolished? Who has done more to assist in cleansing the Augean stables than he has done in

all the suggestions he has made for the information and guidanee of the Legislature? In faet, who has been a greater Reformer in this branch of the profession than Dr. Conolly? Therefore, "honour to whom honour is due." The public testimonial which is about to be presented to him he fairly deserves, and we hope his example may encourage younger men following in the same path to conduct themselves with the same zeal in the eause of science, and with the same perseverance in ministering to the wants of suffering humanity.

NOTES ON CHOLERA.

NO. I.

WHAT WE DID TO STOP THE CHOLERA.

We English are fond of calling ourselves a "praetieal" nation. This epithet, which modestly signifies that we are a nation without any highflown idealistic notions, but aecustomed to act on the simple dietates of common sense, has been so often repeated to us (by ourselves), that he would be a bold man who would deny it. We are hard praetieal men: when we see reason in a thing, we go and do it. We have no theories,—we are no dreamers,—we scorn enthusiasm; but we take it there is no nation on the face of the earth which can put its house in order as we can.

A good instanee of our practical eharaeter is to be found in what we have done since the cholera of 1849. We had the eholera in 1832, and we had various speculative men, (as we thought them, at any rate not sufficiently practical men,) who pretended that the cholera might be half prevented by a little attention to the houses of the poor, by cleansing them, by letting fresh air into them, by removing from among them all dunghcaps and masses of decaying matter, by supplying them with water, and, in fact, making them salubrious, instead of unhealthy habitations.

Just before the cholera of 1849, these notions were revived. Boards of Health, Sanitary Commissioners, Registrar-Generals, all were at us; but, like a practical nation, we thought we would wait and see. In the autumn of 1849—we had not to wait any longer, for we got the cholera, and had enough of it,—and now it beeame quite clear to us, that these sanitary dreamers were in reality no dreamers, but were more praetical than we were; and that it was a great fact, that if we had done what they had told us to do, we might have saved the lives of some 8000 or 10,000 praetieal Englishmen in this metropolis, and have saved ourselves the nuisanee of that eternal levying of rates which has been going on ever since to support the "eholera widows" and "cholera children."

Consequently we set to work, and began at the worst plaee in the kingdom, viz., our far-famed metropolis.

It had been pointed out, that our sewerage was defective; therefore, without loss of time, we summoned our Brunels and our Stephensons. They gave up at once their comparatively useless labours of throwing tunnels over Menai Straits, and digging tunnels under Father Thames, works which spare a railway ten miles of road, or a foot passenger 500 yards, and commenced directly that important labour of tunnelling London in all directions, which is to save many a man from a journey hence to the other world.

Then our water-works had got out of order. We looked into this at onee. The water was bad—the supply worse; the only good practical point was, that the touch of the Directors, like that of Midas, turned the water into gold; but as this did not benefit us at all, but only them, we took, like praetical men, the water supply into our own hands. We assumed, as our model, the great Roman aqueducts,—works which were thought a good deal of in olden times, but which are trifles to us who cross the Atlantic in nine days. But the Romans were praetical men, although not quite up to us. They had pure source, and unlimited supply; they washed out all their eloaca; they covered acres and acres with their baths, and then poured their refuse rivers into the yellow Tiber, which they took good care not to touch afterwards. Now, as practical men, we own that we were wrong to pour all our rivers of sewerage into the Thames, and then to pump up this sewerage for drinking-water; but that was all a mistake; we were busy making our railways, (a touch above the Romans,) and had not time to think of water supply.

Some of the medieal offieers in Whitechapel and elsewhere, sound-headed men, who knew a thing or two, then ealled our attention to the dwellings of the poor. It was impossible to clean them, to ventilate them, to let light into them, so close were they built, so irregularly planned, and so ingeniously contrived to evade the window-tax. What was to be done? Why, of course, we could not do all at once, but we took off our window-tax, voted a sum in Parliament to buy some of the worst districts, pulled down the hovels, built comfortable lodging-houses, and found at once that our medical students were obliged to go to Ireland if they wanted to know what typhus fever was. We spent a pretty penny in this way; but then, we had done nothing for the poor for a long time exeept give them some 50,000*l.* a-year for education; and we had spent so much on criminals, and paupers, and pensioned aristocrats, that we thought we might do something for our honest labourers.

The next thing we did was the most praetical of all. The most sensitive part of our frame after our breeches'-pocket, is our digestive system. We live on roast beef and plum-pudding, and bottled porter. We eannot do our work on less. We should grow thin and hippish, and as sour as brother Jonathan, if we starved ourselves. Just look at Ireland, and see what comes of living on potatoes; there would have been no famine, if those unlucky Celts had known what beef was. Well, we were not a little taken aback, when we found what the poor Saxons in London had been living on. Dog's flesh was a joke to it; there were adulterations of all kinds; the old names remained, but the things had disappeared. We forbear to say what "milk" was represented by, or what was the composition of our favourite cheese. We will not dive into the mystery of "faggots," nor relate the uses to which sulphuric acid was put in the ingenious "*métier*" of the small costermonger. We saw at once that the great English nation must degenerate on such fare; that its stomach would in a generation or two become incapable of digesting beef, so we established some sharp active men as inspectors of food, who looked well after all the small sellers, and soon put a stop to much of the adulteration.

We need not say all we did. Of course we told Chadwick he must draw up an extramural Interment Bill, which he did devilish well; and it speaks volumes for the patriotism and good feeling of the undertakers, that, although he took away their clients from them, they one and all would have had the greatest pleasure in performing the last sad offices for him had he happened to need them, which luckily he did not, and we hope he will not at present.

Of course we are all right for the cholera when it comes next. We are "the best-sewered, best-watered, and best-paved city in the world." Our markets are the wonder of foreigners, and reflect immortal glory on our Mayor and corporation. When nationally we die, (which we must some of these dates,) and have to give an account of how we have used our great praetieal common sense, we shall not say, look at our commerce, our cottons, our woollens, our railways, our tremendous long banking accounts. No; we shall say, look at our benevolence; look at our foresight; look at our Christian love. The pestilence passed over us, but found no victims, because we had removed those evils on which that pestilence was permitted, by the wisdom of Providence, to exist. Nationally we have no blood on our hands. The lives given to us we preserved. Only in the ordinary vicissitudes of life, and according to the inevitable decay of nature, did our brethren die. Our brother's blood does not cry against us from the ground. Or, if we cannot say this, we shall probably have some good practical reason to give as to why we were prevented from doing what common sense so plainly told us ought to be done.

MEMOIR OF DR. BURNS, F.R.S.,

REGIUS PROFESSOR OF SURGERY IN THE UNIVERSITY OF GLASGOW.(a)

One of the most respected and, in his day, eminent, members of the profession, has perished by the wreck of the Orion steam-ship. Few men in Glasgow were better known or more universally esteemed than Dr. Burns. Although full of years and honours, his sudden and melancholy end has

(a) Compiled from authentic sources.

given rise, in all circles, to feelings of deep sympathy and regret. He was descended from a family of the name of *Burn*, who were in possession of a small property in Stirlingshire. This property was sold by his grandfather, who afterwards removed to Glasgow, where he settled as a teacher, having previously published a Dictionary and an English Grammar, which were long esteemed and in general use as school books, in the west of Scotland, about a century ago. His father was educated for the Church of Scotland, and added an *s* to his name, because he had been so designated in some legal instrument.

The Rev. Dr. Burns was presented by the Crown, in 1774, to the Barony Parish of Glasgow, one of the most important and populous in Scotland. He discharged the duties of minister of that parish for upwards of sixty-nine years. He died in 1839, in the ninety-sixth year of his age; and, at the time of his death, was the Father of the Church of Scotland. He preached for many years in the crypt of the High Church, then used as a place of worship for the Barony Parish.

John, the subject of this brief memoir, was the eldest surviving child of the venerable pastor. He was born in 1775. He began his professional studies in Glasgow, and completed them in Edinburgh, where he was the first surgeon's clerk in the Royal Infirmary, he having just completed his studies when that institution was opened for the reception of patients, in 1792. At that time he gave himself up with great zeal to the study of anatomy, especially to that department which has been termed relative or surgical anatomy. He was, at that time, offered an appointment in the army, which he declined, and settled as a practitioner in his native city—Glasgow.

His brother Allan followed his footsteps, in studying for the medical profession; and at an early period the brothers, in conjunction, became eminent as lecturers on anatomy.

The doctor was the first person who gave lectures in Glasgow unconnected with the University. His lecture-room was originally at the head of Virginia-street, at the north-west corner, behind the present Union Bank.

In those days no legislative enactment permitted the use of dead bodies for dissection. They were all obtained by the students robbing the churchyards. Mr. Burns being detected in some scrape of this sort, the magistrates agreed to quash proceedings against him, on condition that he gave up lecturing on anatomy. This he agreed to do; but his younger brother, Allan, took up the lectures on anatomy, while John began to lecture on midwifery. The lecture-room of the two brothers was then removed to a brick flat, built on the remains of the old Bridewell, on the north side of College-street, where it still remains.

The brothers were extremely popular as lecturers: Allan was monotonous and unpleasing as a speaker; but first-rate as a demonstrator. Dr. Burns was much more agreeable in manner. His matter, moreover, was excellent, his knowledge exact, and his views practical, whilst his lectures were interspersed with jokes and anecdotes which quite captivated the students. Although his lecture was a very early one, nine in the morning, so great was the attraction, his manner so pleasing, and his lectures so excellent, that the room was always crowded.

Hitherto the Doctor was not known as a practitioner; and when no lectures or dissections were in hand, he was to be found, day after day, in Stirling's Library, reading. Being asked on one occasion, by an acquaintance, what became of his patients while he sat there; he quietly answered, "I have none!"

Mr. Allan Burns visited Russia, where he received from the Empress Catherine a valuable and beautiful gift in token of the esteem in which Her Majesty held him as a man of talent in his profession. On his return to Scotland he prosecuted with vigour and success his labours as an anatomist; but he was cut short in his career, in 1813, by a wound received in dissection. He left behind him a reputation rarely attained at the early age of 32. Many a talented surgeon and anatomist has been thus laid low.

Mr. John Burns now began to show the nature of his studies by the publication of several works. His first work of any importance was the "Anatomy of the Gravid Uterus," which appeared in 1799. This was followed, in 1800, by two volumes on "Inflammation," in which he first described a species of cancer, now known by the name of fungus hæmatodes. These two works stamped their author as an observing practitioner and original inquirer. They were followed by "Observations on Abortion," in 1806; "Observations on Uterine Hæmorrhage," in 1807; and by the most popular of all his medical writings, "The Principles of Midwifery," in 1809, a book which has been translated into various European languages, and has reached a tenth edition. It still enjoys a good reputation, as a standard work on the subject of which it treats, although of course the science of midwifery has made great strides since the appearance of the last edition.

He, married, in 1801, the daughter of the Rev. John Duncan, minister of the parish of Alva, in Stirlingshire, and, in 1815 he was appointed Regius Professor of Surgery in the University of Glasgow. In 1810 his wife died, and he remained a widower during the forty years that he survived her. By her he had four children,—the youngest, Allan, named after his uncle, was born in January, 1810.

At an early period of his professional career, Mr. Burns became surgeon to the Royal Infirmary, and distinguished himself by the nerve with which he operated. He subsequently became the partner of Mr. Muir, and, after Mr. Muir's death, of Alexander Dunlop—a connexion which brought him speedily into excellent family practice. Nevertheless, he continued to lecture on midwifery till 1815, when, the Crown having instituted a Regius Professorship of Surgery in the University, he was appointed to that chair, in which he remained to the last.

His son Allan followed the medical profession, and, having completed his studies, after a residence of three years on the continent, he commenced practice in 1832. With an intimate knowledge of his profession, and a love of anatomical pursuits equal to that of his uncle, after whom he was named, he was rising fast into eminence, when intermittent fever, caught in the prosecution of his medical duties, carried him off after a short illness, in November, 1843, in the thirty-fourth year of his age.

Soon after his son entered upon the arduous duties of medical practice, the subject of this memoir took out his degree, which he had previously refused to do, and was shortly afterwards elected physician to the Royal Infirmary. He had subsequently a considerable practice as a consulting physician.

Dr. Burns had been gradually retiring from the labours of his profession, when the severe affliction, caused by his son's decease, befel him. He then gave up everything excepting the Chair of Surgery in the University, the duties of which he discharged to the last, devoting much of his time to carrying out the views of the Principal and Professors of the College, as respected the medical school,—in testimony of which, he was requested by the Senate to sit for his portrait, which, having been taken by John Graham Gilbert, was placed in the Hunterian Museum of the College.

In 1828—38 appeared the "Principles of Surgery," in two volumes, a work which cost Dr. Burns much labour, but, being very dry and minute, it never had much sale. He likewise published a popular work on the Treatment of Women and Children, together with some religious books, which were well received by the public.

As early as the time of his being a student in Edinburgh, his mind was imbued with religious principles, which sustained him during a long life, chequered with many afflictions and bereavements. His principles were what are usually called Evangelical, as may be seen in a theological work which he published, called "Christian Philosophy;" in the appendix to which there is a touching allusion to the bereavements he had sustained. Kept true to his faith, he was removed from this world, in the attitude of prayer, on that awful morning on which the Orion was lost.

In politics he was a high Tory, and was greatly wroth with Peel and Wellington for emancipating the Catholics. He lived in good style, and was of a cheerful disposition. With his patients he was a great favourite, and towards his brethren of the medical profession he behaved, on all occasions, in the most honourable manner. In person he was under the middle height, with gray flowing locks, and his dress was very neat and antique. Few individuals in Glasgow were unacquainted with his exterior, and thousands who knew little of his professional attainments were yet familiar with his appearance as a respectable medical gentleman of the old school.

Dr. John Burns was a F.R.S., and a member of the Institute of France, and of several other literary institutions in various parts of the world.

His only surviving child is a major in the army, and inherits his fortune.

Dr. Laurie, the Professor of Surgery in the Andersonian University, has been appointed to succeed him in the Chair of Surgery at the University of Glasgow. Dr. Fleming and Mr. Lyon are candidates for the chair vacated by Dr. Laurie. The Andersonian University is not, as its name would imply, a school of medicine where degrees are granted, but a private institution. Dr. Laurie has a great reputation as a lecturer in Glasgow, and will, we doubt not, prove a worthy successor to the deceased professor.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

TURNING BY EXTERNAL MANIPULATION.

The endeavour to rectify the faulty position of the fœtus in utero, by external manipulation, engaged much of the attention of the older practitioners, and especially of Wigand in 1807, but is scarcely alluded to in modern works on midwifery. Professor Martin, of Jena, has recently published an interesting essay upon the subject, based upon twenty-seven cases related by other authors, and seven which have occurred to himself. In these all the mothers did well, as also all the children but four, of which number, too, one was already dead, and another was delivered by perforation.

It is evident that an exact knowledge of the position of the child must be obtained before the attempt is made, and Professor Martin believes it is preferably acquired by external examination, although this implies a certain amount of dexterity. It is only prior to, or immediately after, the discharge of the waters, that the fœtus will be found possessed of sufficient mobility. As long as the os is undilated, and the pains irregular, the patient is kept on the side upon which the part desired to be forced into the pelvis is placed, so as to afford a moderate support. When, however, the os has become dilated, and the waters are expected to be discharged, she is laid (the bladder and rectum having been emptied) on her back, the lower part of her body being somewhat raised. With one hand the operator presses the part of the fœtus which lies nearest the os, whether it be the head or breech, downwards, while, with the other, he presses the rest of the body upwards. This simultaneous pressure is begun during the interval of a pain, and continued during its commencement, while, during the height of this, the uterus is firmly supported on every side. After a short pause the manipulation is again recommenced, and, if the operator's hands become tired, an assistant may, during the intervals of the pains, support the belly on each side, whereby the ovoid configuration of the uterus is better secured, and the child more easily brought into a proper position. If the pains are long absent, she may often be advantageously placed on her side, supporting the projecting part by the hand or a firm cushion. Especially is this position advantageous if manipulation has already somewhat improved the position, and it should, if possible, be continued after the head has entered the pelvis. For the purpose of retaining the head within the pelvis, when the improvement of the position is not durable, the rupture of the membranes, after the head or buttocks have been brought over the os, is a very efficacious procedure.

Among the rules to be observed, there is that of never employing a cold hand, for, not only is it disagreeable, but it may give rise to spasmodic action and the premature discharge of the waters. The pressure, too, should be moderate and continuous, and applied sometimes in a diffused manner with the flat hand, and at others by particular fingers, to various parts of the child. It must be always a double and simultaneous pressure, exerted equally towards the fundus and upon the part we are seeking to engage in the pelvis. A change in the position of the woman is often an important aid to the manipulation.

There are certain conditions requisite for rendering the operation of external turning an eligible one,—1. Absence of reasons for a rapid termination of labour, as hæmorrhage, presentation of funis. 2. Mobility of the child. Generally this ceases after a discharge of the waters. If, however, few pains have occurred, the presenting part has not become far forced down, or the uterus firmly contracted around it, a trial is justifiable. 3. Absence of great sensibility of the womb or abdomen. 4. Sufficient capacity of pelvis. A moderate degree of contraction is no contra-indication. 5. A normal activity of pains has been set down as a condition. It certainly is a very favourable one, but it is rare in faulty presentation, and not an essential one for external turning. Spasmodic or crampy pains, which render the first two stages tedious, if due to cold, are best treated by mustard poultices and small doses of ipecacuanha. The very rectification of the position sometimes imparts a normal activity to the pains. External turning is rarely successful when the defective pains are dependent upon a rheumatico-catarrhal affection of the lower portion of the uterus giving rise to a softened state and premature rupture of the membranes. 6. The child being alive is a subordinate condition; for, although in the case of its death, internal turning may usually be advised, yet we very frequently cannot be certain of this.—*Froriep's Notizien, X., Nos.* 16, 17, 18.

LABOUR WITH PROCIDENTIA VAGINÆ.

Professor Rizzoli relates the following interesting case:—Maria Pierpaoli, aged 35, mother of four children, and accustomed to laborious occupations, had suffered for some years from procidentia vaginæ, which, however, returned when she assumed the horizontal posture. During her fifth pregnancy the inconvenience disappeared, and she had reached her ninth month, when, while raising a heavy burthen when three miles from home, the waters were suddenly discharged with great pain and a cracking sound, and a body passed the vulva, which she believed to be the head of the child. Nevertheless, with great difficulty, and after many stoppages, she reached home nearly exhausted.

A friend of Professor Rizzoli saw her about seven hours after the waters had come away, and found a turgid deep-red projection, the size of the child's head, formed by the prolapsed and inverted vagina, through which a small foramen allowed a finger to pass up to the head itself. Behind this the perinæum was torn to the anus, the rectum forming an arciform projection. All attempts at reducing the vagina were in vain, as the pains expelled it more and more outwardly. It was proposed to make several incisions so as to relieve the engorgement, and allow the head to pass. This the patient refused to consent to, and it was only after many hours, when the parts threatened mortification, and her strength was rapidly going, that permission was even given to attempt to dilate the opening in the swollen vagina. The forceps was introduced through this with much difficulty, and with the effect of inducing lacerations in the vagina and the loss of much blood and other fluid. However, a live child was delivered, the placenta removed, and the vagina returned without much difficulty. The woman was excessively exhausted, but the hæmorrhage ceasing she soon revived. The precise period of the delivery is not stated; but, from the particulars given, nearly twenty-four hours must have elapsed from the rupture of the membranes.

The perinæum was kept carefully bandaged for fifteen days, and absolute rest enjoined for a longer period. In forty days all had completely healed, and the procidentia was cured. Professor Rizzoli has frequently succeeded in healing a ruptured perinæum by rest alone.—*Bulletino delle Scienze Medich.* 3 Ser. XV., p. 63.

ZINCUM ACETICUM IN ANGINA TONSILLARIS.

Dr. Plange states, that he has derived great benefit from the employment of this substance, and especially so in about thirty cases which occurred during an epidemic of scarlatina, in which it was exhibited in very different degrees of the affection. Relief almost immediately followed, a cure usually taking place in two or three days, and in no instance did suppuration occur. He prescribes from ℈i. to ʒi., in from ʒvi. to ʒviii. water, giving a tablespoonful in some mucilage every two hours in severe cases, frequently gargling the throat also with the same.—*Schmidt's Jahrb.* Vol. LXIV., p. 172.

CURIOUS EPIDEMIC AT WEGELEBEN.

Wegeleben is a small town in the circle of Oscherleben, having 2700 inhabitants, most of whom are engaged in agriculture. In it there is a beet-root sugar manufactory employing 170 persons. In the early part of November a great number of these became seized, within a few days of each other, with diarrhœa, colic, vomiting, and, in some

cases, cramps. Most of them, notwithstanding the diarrhœa was urgent, continued at their work, and after a few days constipation followed. When this was the case, however, a new train of symptoms appeared. After suffering from lassitude and stiffness of the limbs, the patient became seized with violent pains in the back, chest, arms, and especially the legs. These last soon became much swollen, but neither red nor hot; the face was of a dull white, and sometimes œdematous; the appetite was lost; the urine troubled; and the pulse quick and small. Upon the least exertion sweat streamed from the body. After five or six days the patient was unable to leave his bed on account of the swelling of the legs, and an almost paralytic-like feebleness of the limbs and back. Fever increased rapidly, cramp affected the legs, and the swelling of these became enormous. The *morale* was much depressed. In eight or ten days a miliary eruption, amidst great præcordial suffering and sweating, appeared upon the arms, chest, and back (never upon the legs,) and was succeeded in most cases in a few days by another eruption, very much resembling the *ecthyma acutum* of Rayer. The development of this last seemed a fortunate occurrence, since in only one of the fatal cases was it observed. Although from the period of the development of fever the bowels became confined, yet the mildest aperients always induced a violent diarrhœa; but although the belly was distended and somewhat painful, it did not present the conditions observed in typhoid fever. As soon as the fever diminished, a vigorous appetite returned, and a patient lying in bed with the lower part of his body swollen and almost motionless, longed for and bore the coarsest articles of food. Although the patients were dejected and alarmed, symptoms referrible to the brain were observed in very few cases. In those cases which terminated unfavourably, signs of effusion into the cavities of the brain, the pericardium, or pleura were present; and in those in which a favourable issue was obtained, the febrile condition continued for twenty-one days, and was followed by a very tedious convalescence, not unfrequently complicated by bed-sores. No *post-mortem* was permitted.

In the first stage of the disease no means of treatment could be completely relied on. In the strong and plethoric, blood was taken, and salines administered; the sulphuric acid proving an excellent means of diminishing the intense thirst. Those first attacked, in whom the disease showed itself more severely and fatally than in late cases, vomited all taken, and found relief from this symptom in the use of ice. When the fever took on the tertian type, which it did not unfrequently, quinine was administered, and that so advantageously, as sometimes to cut short the disease in less than fourteen days. In the second stage, in which effusion was threatened, calomel and digitalis were given.

The disease quickly extended from the factory to the inhabitants at large, affecting persons who had not the most remote contact with those originally seized, and belonging to a higher class of life—women and children being also among the subjects of it. Of the 150 persons attacked, almost all were so within three weeks, so that Dr. Rudloff, the only practitioner of the place, had to visit no less than 72 cases in one day. There were 56 cases in the factory, and 94 in the town; 21 of the former and 6 of the latter proving fatal. The entire duration of the epidemic was limited to eight weeks. It was not contagious, and was not communicated to the neighbouring villages, although some of the sick workmen resided in these. A popular belief that the disease was due to the introduction of some new process in the sugar manufacture was quite unfounded, the same means being followed in that of Wegeleben as in the other numerous sugar factories of the district, while it was found well circumstanced as regards hygienic dispositions. Moreover, the other inhabitants of the town were almost simultaneously affected, without having been near the factory. Most of the workmen were robust healthy young men, and were well clothed, fed, and lodged; and the fact of so much greater a mortality (21 in 56 cases) taking place among them than among the inhabitants of the town (6 in 94), was probably due to their persisting in working long after the disease was upon them. On examining into the condition of the town, Dr. von Andreæ, the inspecting officer of the district, found it sanitarily situated, and offering in the state of the habitations no explanation of the occurrence. It is usually a very healthy place.

It will have been observed, that the disease was almost always ushered in by a severe diarrhœa, or choleroid symptoms. From June, 1849, the district of Magdeburg had been visited by the cholera, so that 50 places had one after the other been attacked, and 1174 fatal cases had occurred. It was at its height in August and September, and then diminished in the latter part of the autumn. The last place attacked was situated at two and a half German miles from Wegeleben; and there too (early in November) it ravaged especially a sugar manufactory. If it had not been for the peculiar fever which followed the cholerine symptoms at Wegeleben, these would, as a matter of course, have been set down as arising from the cholera miasma derived from that locality. That in the presence of such miasma the workmen of the factory should especially suffer, resulted from their habit of working in high temperatures, and rushing carelessly with sweating skins into the cold air, as also from the injurious effects which the sweet vapour by which they were surrounded must exert upon the nervous system of the digestive organs. Dr. Andreæ endeavours to explain the occurrence by a supposed conversion of the gastric element of the cholera into one of a rheumatico-exanthematic description, although he admits this supposition is merely conjectural. It seems all the medical reports for the three last months of the year concur in stating, that the medical constitution of the district took on first a remarkably catarrho-rheumatic, and afterwards an exclusively rheumatic character; and many physicians were much surprised to find, in spite of the prevalence of cold winds, inflammations so rare, and the lancet so seldom required. Rheumatism, indeed, often assumed the character of neuralgia, and an asthenic condition predominated. In many points of the district there also prevailed during this period febrile eruptions, especially scarlatina and variola; and Dr. A. suggests that this rheumatico-exanthematic condition might have overcome and taken the place of the subsiding cholera.—*Medicinische Zeitung*, 1850, Nos. 7 and 8.

ON THE NON-IDENTITY OF FLESH AND BLOOD FIBRINE.

Liebig has lately made some important observations on the properties of the fibrine of blood and of flesh substances, which have erroneously been considered to be identical. The two substances behave in very different ways when treated with water, acidulated with 1-10th per cent. of hydrochloric acid. Blood fibrine swells into a gelatinous mass,—corrugated by addition of acid,—recovering its gelatinous consistence when water is again added. Flesh fibrine, on the contrary, dissolves completely, the solution being rendered turbid only by some fatty particles, which can be separated by filtration; when neutralised, the fibrine coagulates to a thick white mass, soluble in excess of alkali. Common salt added to the alkaline solution produces a coagulum soluble in excess of warm water; the white mass produced by the neutralisation is also soluble in lime-water, and the solution, when boiled, yields a coagulum like a dilute solution of white of egg. In some kinds of flesh, —as in veal and mutton,—in addition to this fibrine, there is another substance, insoluble in water, acidulated with hydrochloric acid.

Blood fibrine contains more nitrogen than flesh fibrine, hence Liebig doubts whether it serves for the formation of the latter substance. Blood fibrine has other remarkable properties; thus, when completely immersed in water, it rapidly putrifies when the vessel is placed in a warm place. The fibrine in about three weeks dissolves completely, forming a slightly-coloured solution, which is indistinguishable from a solution of albumen; not only does a coagulum form when heated, but the coagulated substance, as appears from an analysis of Dr. Strecker, actually possesses the exact composition of albumen ($C_{53\cdot9}$ $H_{6\cdot99}$ $N_{15\cdot58}$ $S_{1\cdot59-1\cdot45}$ Ash $0\cdot28$). After the coagulum has separated, an azotized substance remains in solution.

Liebig observes, that blood fibrine always contains iron, which can be found in the white ash left on incineration.—Abridged from the *Quarterly Journal of the Chemical Society*, July 1850, p. 188.

ON THE PASSAGE OF CUMINIC ACID THROUGH THE ANIMAL SYSTEM.

The remarkable observations of Mr. Alexander Ure, on the transformation of benzoic acid into hippuric acid in its passage through the body, and those of Erdmann on the transformation of ammoniac acid, led Dr. Hofmann to repeat the experiment with cuminic acid, the derivatives from which exhibit a remarkable parallelism with those

from benzoic acid. A considerable quantity of cuminic acid was taken, but was found to pass through the body without undergoing any change, almost as much being found in the urine as had been taken, the amount of loss being not more than is necessarily unavoidable under the circumstances. No other acid was detected.—*Quarterly Journal of the Chemical Society*, July 1850, p. 181.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

CHOLERA—QUARANTINE.

A strange conflict has taken place between the authorities on the subject of quarantine, alluded to in my last letter. The cholera, as you know, prevails with a certain degree of intensity in the island of Malta. Two vessels arrived at Marseilles from the island; one, the French packet Luxor, with seventy-six passengers; the other, the English packet Triton, with twenty passengers. Both vessels were immediately placed under quarantine for four days by the inspectors of health at Marseilles. As soon as this became known at Paris, the Minister sent down an order by telegraph, not to place any vessels in quarantine, unless some death or illness from cholera had actually occurred on board. The Council of Health immediately met, under the presidence of the Mayor, and decided on maintaining its original order. A second Ministerial despatch, still more pressing than the former one, soon arrived, and was followed by a second meeting of the local authorities, who resolved on disobeying the order of their superiors, rather than expose the town to the risk of contagion. This grave act of disobedience could not remain unnoticed or unpunished, and, accordingly, the President of the Republic, on the report of the Minister, has ordered the whole quarantine establishment to be removed from Marseilles to the islands of Frioul. The recalcitrant members of the Quarantine Board will probably be got rid of during the change. They were the last to adopt liberal ideas connected with contagion, and their obstinacy or ignorance will now meet its reward. Since the above was written, the punishment which I anticipated has been inflicted. The members of the Marseilles Board have been all dismissed for disobedience, and the duty of reconstructing a new Board entrusted to Dr. Melier, of the Academy of Medicine. Henceforward, the quarantine for vessels arriving from a country in which the cholera prevails is not to exceed five days.

Apropos of cholera, I may mention, that M. Pellarin read a very important memoir at the late meeting of the Academy of Medicine, on the mode in which that disease is propagated. The cases which he related from personal observation, render it almost impossible to deny that cholera may not occasionally be propagated by contagion. One or two examples seem worthy of record.

Up to the 15th September, 1849, the small port of Pontrieux had entirely escaped the cholera. On the 18th a sloop from St. Malo arrived, with a sailor labouring under cholera on board. The sailor was immediately put on shore, and died soon afterwards. The inhabitant who had carried the sailor in his arms was attacked in a few days, and died likewise. Several persons in the neighbourhood were seized, and the disease became established in the proximity of the harbour. A second example is still more striking. A farmer residing several miles from Pontrieux, was attacked by cholera on his return home from that town. This occurred early in November. The man died in 24 hours. His wife soon followed him to the tomb. A neighbour who visited them while ill was now attacked; then her brother; then the wife of the brother; then a nurse-tender who had washed their linen; and, finally, the nurse-tender's sister, who had nursed her, and divided her linen with the other heirs after her death. It is impossible to conceive a more active focus of contagion than this; yet none of the other inhabitants, who kept aloof through fear, were attacked, and the disease remained unknown in the rest of the parish. M. Pellarin relates four cases of a similar kind, and after perusing them it is difficult to avoid concluding that cholera is occasionally a contagious disease. On the other hand, however, the history of cholera fully proves that the circumstances under which it may become contagious are far from being numerous.

The cholera has completely disappeared from the French possessions in Africa, but intermittent fevers prevail there, as usual, to a great extent, and often with fatal intensity. Hence an enormous consumption of quinine, which is becoming every day more scarce and dear. In the hope of obtaining some means to procure this valuable remedy at a cheaper rate, the Pharmaceutical Society of France has offered a prize of 4,000 francs (200*l.*) to any one who shall discover a mode of making artificial quinine; that is, without employing quinine or any organic matter which contains that principle ready formed. The Minister of War adds 4,000 francs likewise. The prize is open to the competition of all nations. Its value is hardly proportionate to the importance of the discovery. But would it not be more easy to find a substitute for quinine than to manufacture it artificially? The value of arsenic is well established, and many other remedies possess anti-intermittent properties in a marked degree. M. Simon, an interne at the Hôtel-Dieu, has recently been trying the bark of the Adansonia digitata with success. In several severe cases of ague, some of which came from Africa, the complaint was entirely removed after three doses of this remedy. The dose employed was one ounce in decoction.

TREATMENT OF LIPOMA.

Amongst the novelties of the week I may include a new mode of treatment applied, with apparently great success, by M. Legrand, to lipomatous tumours. These are generally removed with the knife, but when the tumour occupies the scalp and has been cut out, erysipelatous inflammation often supervenes, and sometimes proves fatal. To avoid this danger, M. Legrand makes, round the root of the tumour, a linear incision, if we may so call it, with very strong caustic potass. The application is repeated in the same line, as often as may be necessary, until the tumour can be twisted off with a forceps. M. Legrand has performed this operation with complete success in thirty-two cases.

NEW PESSARIES.

Finally, we must not forget a variety of new instruments manufactured in vulcanized Indian rubber, by Dr. Gariel, and chiefly intended for accidents involving the female genito-urinary apparatus. One of the best appears to be a globular pessary, formed of a thin caoutchouc balloon, which is passed into the vagina in a collapsed state, and then inflated. A similar instrument, if I remember right, was proposed by Dr. Keith Imray, now of Madeira.

FRENCH MEDICAL PRESS.

The probable effects on our medical literature of the new law against the press still continues to occupy attention; and, as you can readily imagine, few are rejoiced at the prospect of closer acquaintance with the stamp-office. The measure, in fact, is unjust in every point of view. *All* the numbers of the impression must be stamped, those distributed by hand as well as those forwarded by post. Hence the subscriptions for all must be increased, and the slightest increase of price here has a most injurious effect.

Paris has no less than forty-four journals connected with medicine, chemistry, and the natural sciences. Most of these will be touched. The *Gazette Médicale*, *Gazette des Hôpitaux*, *Union Abeille*, and many others, will have to pay the tax, and nearly double the amount of their subscriptions.

MEDICAL ELECTIONS.

M. Hypolite Larrey, son of the great Baron, and head surgeon to the military hospital of Val de Grace, has been elected member of the Academy of Medicine. It is thought that the vacant chair of comparative anatomy, at the Sorbonne, will be conferred on Isodore St. Hilaire. De Blainville could not have a more worthy successor.

LUNACY CLASSES.

The authorities have recently adopted a measure which completely disorganizes the great lunatic hospitals as schools of instruction. Henceforward the lunatic patients at Bicêtre and Salpètrière are to be equally distributed amongst all the physicians attached to these establishments. A similar measure has been, for some time back, applied to Charenton and the Asylum at St. Yon.

KOUSSO.

The price of kousso here is fifteen shillings per dose, not 1*l.* 15s., as has been stated by misprint in a note to Correspondents.

SCOTLAND.

THE BRITISH ASSOCIATION

Is the chief attraction in Edinburgh. It is a very well attended meeting. The number of those enrolled, strangers and townspeople together, is not short of 1200. This figure, however, includes something short of 300 ladies. Besides a large proportion of men of science of no small mark, there is a considerable sprinkling of peers, baronets, and knights; and among the titled class there are some who can boast of considerable repute in the scientific world. Among the peers are the Marquis of Northampton, the Earls of Cathcart and Enniskillen, Lords Melville, Wrottesley, John Churchill, Ranelagh, and, we believe, the Duke of Argyll have also arrived. Among the foreigners we have Count Augustus Breunner, from Vienna; Kupffer, from St. Petersburg; Hyrtle, Professor of Anatomy, Vienna; Parlatore, Professor of Botany, Florence; Rangabé, Professor of Archæology, Athens; Van der Hœven, Professor of Natural History, Leyden; M. Ludwig Becker, from Mayence; Count Valerian Krasinski; M. T. Necker, from Geneva; Brennecke, from Colberg College, Prussia, &c. &c.

There is no distinct medical section at this meeting, so that physiological and medical papers fall under Natural History. Professor Goodsir is president of this section, and Admiral Sir Charles Malcolm president of the sub-section, Ethnology. The papers read on the first day of the meeting of the sections, Thursday, August 2, in the Natural History section, were wholly botanical and zoological. On the former subject by Professor Royle, Dr. Cleghorn, H.E.I.C.S., and Mr. Babington, of Cambridge; and on the latter, by Sir J. G. Dalyell, Mr. Hancock, Mr. Embleton, and Dr. Macdonald, the new St. Andrews professor. In the Ethnological sub-section, on the first day, Professor Rangabé, of Athens, read some account of recent discoveries in Greece, adding to our knowledge of the ancient Greeks; and Dr. Hinks gave a paper on the language and mode of writing of the ancient Assyrians. Mr. Daniel Wilson then brought a paper before the sub-section, entitled, "An Inquiry into the Evidence of the Existence of Primitive Races in Scotland prior to the Celtæ." Mr. Wilson showed, that by the examination of the crania found in the primitive barrows of Sweden, instituted by Nillson, it had been ascertained that four successive races had occupied that country. He then went on to produce evidence of the existence of two primitive races in Scotland, differing decidedly in cranial characteristics from the Celtæ, and the first differing also in a striking manner from the earliest race of Scandinavia, while the second race of the Scottish tumuli corresponded to the primitive race of Scandinavia. An interesting collection of crania was exhibited from various Scottish cairns and barrows, and altogether the paper excited much interest, as opening up a new field of inquiry in Scottish ethnology.

On Friday, in the Natural History section, a paper was read by Mr. Owen, on the Natural Segments of the Vertebrate Skull; and another was read from Mr. George Newport, on the Reciprocal Relations of the Vital and Physical Forces. The other numerous papers were on subjects of too particular a nature to be of much interest in the mere enumeration of their titles. Among the authors, however, were Professor Daubeny, of Oxford; Professor Edward Forbes, of London; Professor Allman, of Dublin, and Professor Parlatore, of Florence. In the Ethnological sub-section, on the same day, the subjects turned on the Condition of the New Zealanders; on the Sicilian and Sardinian Languages; on the Adoption of Oriental Words into the English Language; on the German, Lithuanic, and Slavonian Tribes; and on the Scottish Picts and "the Scottish Conquest."

Hitherto the proceedings of the Association at this meeting, of direct interest to the medical profession, have been rather limited. The President, Sir David Brewster's address at the opening meeting, on the last day of July, was, in every respect, admirable; its topics were chiefly astronomical, yet it ranged over many subjects besides. One or two passages are worth quoting for their general bearing:—"It would be of little avail to the peace and happiness of society if the great truths of the material world were confined to the educated and wise. The organisation of science, thus limited, would cease to be a blessing. Knowledge secular, and knowledge divine, the double current of the intellectual life-blood of man, must not merely descend through the great arteries of the social frame. It must be taken up by the minutest capillaries before it can nourish and purify society. Knowledge is at once the manna and the medicine of our moral being. When crime is the bane, knowledge is the antidote," &c. &c. And the venerable President went on to show the duty thence incumbent on a Government as to the education of the people; and then remarked, "There is much reason to fear that every great advance in material civilisation requires some moral and compensatory antagonism; but, however this may be, the very indeterminate character of the problem is a warning to the rulers of nations to prepare for the contingency, by a system of national instruction, which shall either reconcile or disregard those hostile influences under which the people are now perishing for lack of knowledge."

Among the subjects in the Physical section, during the two first days, was the character of the waves of the Atlantic Ocean, by Dr. Scoresby, a subject which seems to promise to assume a practical character, as bearing on the means of rendering navigation more safe. Mr. Follet Osler made some observations on the necessity of determining the great currents of the atmosphere at different points, instead of confining attention to local winds; and Sir David Brewster gave a notice of the polarising structure of the eye. In the Chemical section, Professor Volecker read a paper on the Percentage of Nitrogen as an Index to the Nutritive Value of Food; the purpose of which was to show, that the present method of determining the nutritive value of food by chemical analysis is objectionable. Mr. J. P. Gassiot exhibited a diamond which had been fused by the voltaic battery, arranged as in the device for the electric light. This diamond, instead of passing into coke, as happens when diamonds are fused in ordinary circumstances, had become a glassy mass, consisting apparently of a number of small crystals adhering to each other. Among the other subjects in this section were a very full view of the action of light in chemical changes, bearing on the whole subject of photograph, by Mr. Hunt, and another on the action of sun-light over the action of dry gases on colours, by Dr. G. Wilson, in which it was shown, though coloured papers remain unchanged for years in chlorine gas when light is excluded, yet, when light is admitted, that six weeks suffice to cause total extinction of colour. Dr. Lyon Playfair showed the remarkable condensation of the substance of minerals containing water, insomuch that, in many solid bodies in which water is present, such a condensation occurs, that they occupy no greater space than the water in them does when frozen into ice. Dr. T. Anderson announced some interesting results obtained by the action of nitric acid on vegetable substances; and Professor Williamson, of University College, London, laid before the section a very ingenious theory on the production of ether, which became the subject of an interesting discussion. In the mechanical section, among other communications, was one from Mr. Macpherson, on a method of preventing the bursting of water-pipes from frost; the method was to empty the pipes. This he proposed to do, by causing the expansion consequent on the freezing, to shut the service-pipe, and open the waste-pipe.

Mr. Nasmith gave an account of a new arrangement of the reflecting telescope, by which the necessity of moving the eye on a change of position in the telescope, was obviated. Professor Smith explained a method of cooling the air in tropical climates and over-heated apartments, which consisted in condensing air, and, after allowing it to cool, to throw it into the chamber, the air of which was heated, so that by its expansion it might cause a diminished temperature; and Mr. Appold explained the arrangements in his hygrometric instrument for regulating the atmospheric moisture of houses.

In the Statistical Section, Mr. Porter, on the first day, showed the great amount of what he termed voluntary taxation in this country; that is, the enormous sum expended on the unnecessary articles,—alcoholic liquors and tobacco,—amounting, as he declared, to 57 millions annually in the United Kingdom. There was one very melancholy statement made, which we think must be exaggerated, namely, that in the workman class, the lower the wages the larger is the proportion spent by the man on indulgences in which his wife and children have no share; amounting, when the wages are no more than ten or fifteen shillings a week, to fully one-half; and, when the wages average thirty shillings a week, to a third. The same gentleman, on the second day, gave a very interesting statement on the increase of capital, from which the satisfactory conclusion appeared,

that the middle class in this country is progressively increasing in number, and in the proportion which it bears relatively to the whole population of the kingdom.

LIVERPOOL.

CAUSES OF CHOLERA.

In the *Medical Times* for July 27th, are some remarks in reference to the re-appearance of cholera in the metropolis. They are in some respects just, and, so far as they go, show a knowledge of the character of the disease; but, as regards the given cause, there may be some question, though there be appended to the article an extract from the Registrar-General's Report, the intention of which is to show that cholera depends on the stench arising from drains, open sewers, and other places from which noxious effluvia emanate. That this disease depends on other causes, I have facts before me to prove; and I shall endeavour, as briefly as possible, to bring them before your readers.

Statistics before me in a great measure upset the doctrine above alluded to, and they are too important to be left in *statu quo*. By Mr. Rose, night-soil contractor, 118 men are regularly employed for the sole purpose of emptying ash-pits; their ages vary from 20 to 60, the average being from between 30 to 40. They have been employed in this work from 1 year to 22, the average being from between 10 years to 15. Only 8 of these men have had attacks of epidemic fever, but recovered. Last year only 4 were attacked by cholera, but their illness was attributable to other causes than their employment—one had been in a state of destitution, and had eaten too much herring and cabbage; a second had drunk excessively of porter; the third had been exposed to cholera in the court in which he and his family resided, while the fourth had disordered himself with drinking ginger beer or lemonade, as he was a teetotaller. In addition to this, it may be well to remark, that the occupation of night-soil men is so healthy, that about fifty, who go out to brickmaking or harvest work in summer, are so much reduced in health as to look worse than those regularly employed; but when they have been employed in the winter in emptying ash pits, in the returning spring they are very much recovered, and look better men.

These statements have been given to me as facts, and as facts I hand them to you. I have no reason to doubt their accuracy. If they be facts they militate much against the doctrine which has of late gained so much ground, viz., that fever, &c., spring from noxious matters, emanating from human and other refuse. It is highly probable that fever, &c., spring from other sources; and in support of this I may mention a circumstance that occurred in Liverpool a few years ago.

Fever prevailed in the district of Everton to a considerable extent, when it did not occur in other parts of the town. The locality named is considerably higher than forty feet above the districts in the immediate neighbourhood of the river, where fever undoubtedly is often prevalent. At the time to which I allude the wind was blowing from the south-west, and continued to do so during the prevalence of the endemic. It is worthy of remark, also, that the disease extended from the top of the hill down to a row of houses at the bottom. There it stopped, and afterwards disappeared from the town.

I have no doubt that if fair, accurate, and scientific observations were made, and men of ability had to do it without having recourse to written testimony, in a few years we should be wiser on these points than we are at present; and I trust that those who are at present engaged in these inquiries will not overlook the remarks I have just written.

WEEKLY MORTALITY.

According to the report of the medical officer of health the mortality is on the increase, the deaths being 212. The deaths were 28 more than the previous week, but compared with the same week of 1849 there was a decrease of 56. The bowel conplaint amongst children is exceedingly prevalent and fatal. This circumstance leads me to remark, in addition to what I forgot in my last report relative to diarrhœa, and the mixture which I stated as being so beneficial, that purging in many cases assumes a dysenteric character, in which cases the castor-oil emulsion and opium appear to be the most suitable remedies, if they can be retained on the stomach. The weekly report judiciously gives no intimation of cholera; but the poorer classes are evidently in some cases fully aware of its presence.

The mean temperature of the week was 66 degrees—the same as the previous week, and four degrees higher than the same week in the four preceding years. The temperature last Tuesday week was 81 degrees, and Friday week 66 degrees.

GENERAL CORRESPONDENCE.

PLACENTA PRÆVIA.

[To the Editor of the Medical Times.]

Sir,—I have received the enclosed note, with the details of a case of placenta prævia, from an old pupil, and should be obliged by their insertion in the *Medical Times*.—I am, &c.

Charles Waller.

Finsbury-square, July 29, 1850.

"Queen's-road, July 27, 1850.

"Dear Sir,—Knowing the interest you take in cases of placenta prævia, I am induced to forward you the particulars of the following case, as confirmatory in some degree of the views you have been advocating lately in the *Medical Times*.

"Should you deem it worthy of publication, I beg you will make use of it.—I am, &c.

"Dr. Waller, &c. &c." "Edmund E. Hooper.

"On the 6th June last I was called to attend Mary Cochran, a poor married woman, who had had three previous children, and was a parish patient of my friend Mr. Nicol, the district surgeon, (he being engaged otherwise). I found her lying on the floor, blanched with loss of blood, which was flowing freely. On raising her to bed she nearly fainted. I learned that she had been in labour a few hours only, having a considerable *show* until suddenly violent hæmorrhage had taken place,—half a pailful, according to an attendant's statement, having been lost. Six weeks before she had lost a considerable quantity of blood, and had then applied to Mr. Nicol, who suspected the state of the case, and ordered strict rest; no return of bleeding had taken place until the labour set in.

"On examination, the os uteri was nearly dilated, and the placenta protruded through, the edges adhering equally all round. I immediately administered a strong dose of secale cornutum, and, separating the remaining attachments of the placenta, brought it quickly down into the vagina, assisted by the uterine pains, which were pretty strong. The head of a large child immediately took its place. The hæmorrhage stopped immediately, on my separating the placenta, before it could be brought into the vagina. Labour went on, but the child was not born for twenty minutes or half an hour afterwards, and of course was dead. The mother quickly rallied, and did well without any further accident. My friend Mr. Nicol arrived just before it was all over, and it is with his permission that I beg to place this account at your disposal. "Edmund E. Hooper, M.R.C.S."

UNIVERSITY GRADUATES' COMMITTEE.

[To the Editor of the Medical Times.]

Sir,—In publicly thanking you for your leading article of the 27th inst., on the London University Graduates' Committee, I believe I am only expressing the opinion of the majority of the graduates who have deeply felt, that until the present moment, their interests as a body have scarcely obtained from the press that amount of attention and supervision which is so necessary to an university called into existence by the wants of the 19th century.

The Committee consists, as you remark, "of able and enlightened men," whose faults must be looked upon as errors in judgment, inseparable from their constitution. It is now nearly two years since they were elected *en masse*, after a protracted discussion. Had any gentleman suggested the utility of striking one or two of the names off the list, he would certainly have made an invidious distinction, though, as the sequel has proved, by so doing the present unhappy

position of the graduates with respect to the senate would have been prevented.

The gentlemen of the Committee appear to hold office for life, filling up the vacancies without the so-called constituents being ever required to vote on the question; hence, until a certain number retire annually eligible for re-election by ballot, it will continue an impossibility to transfuse any healthy blood into the body politic. On each occasion that I have attended the graduates' meeting, it has invariably been the same gentleman who has thrown down the apple of discord, insulting both friends and foes, well-knowing the electors (?) have not any means of punishing his temerity.

Surely, in this juncture, the *Medical Times* will not refuse to keep a sharp eye and hand over this liberal Committee; and I have the honour to be, Sir, your obedient servant,

SENEX.

THE *POST-MORTEM* CÆSAREAN SECTION.

[To the Editor of the Medical Times.]

SIR,—I have pleasure in producing notes of the case alluded to last week, in reference to superseding the necessity for *post-mortem* Cæsarean section. If you think they are worthy of notice, you are at liberty to present them to the profession. The history of the case, anterior to the death of the patient, presents nothing pertinent to the present subject: it will be useless, therefore, to occupy your columns with it. The remaining question for consideration is, how to save the child in the event of its being alive at the death of the mother? There can be no question as to the propriety of exerting one's self in behalf of the child, but the manner may yet be an open question. With all deference to the established practice of performing the Cæsarean operation, even upon the dead subject, it is a very revolting practice to have recourse to, perhaps in the presence of by-standers, the body warm, and life only just extinct. I had often anticipated this state of things during my attendance upon the patient when living, and had resolved to effect delivery in the natural way, though then unacquainted with its practicability. Both the mother and child were dead before I reached the house, which was a mile off,—the mother having died of apoplexy, at the full period of utero-gestation, and within a quarter of an hour of the seizure. By way of experiment, I tried how far I could succeed in overcoming every difficulty in the way of delivery, and what length of time it might occupy. In passing my hand into the vagina there was no resistance to encounter: the sphincter vagina readily gave way; but an entrance into the uterus was not so easily effected. It occupied from three to five minutes to overcome the contracted os uteri, so as to have a "full, free, and perfect dilatation," and to be able to command every part of the child. The difficulty at first seemed insurmountable, and I had nearly abandoned the attempt on that account; but by main force I contrived to insinuate the end of one finger within the os uteri, over the first knuckle; having accomplished that, there was no difficulty in retaining it there, for it felt as though it were grasped by a circular band of fibres, unwilling to relinquish their hold. Availing myself of this state of rigidity, I pulled down the neck of the uterus, outside the os externum, producing, in fact, a prolapsus uteri. The cervix easily admitted of being elongated, and I was upon the point of amputating it; but at length, by a little perseverance, with violence, contorting and mutilating in every possible way, I succeeded in getting another finger within the os uteri. The difficulty then seemed to be overcome, the mouth of the uterus opening, as it were, spontaneously to admit the whole hand, when I ruptured the membranes, and felt for pulsation at the cord and at the heart; but, as might be expected, all was still. Under these circumstances, it would have been useless to deliver. I unwillingly left the child as I found it, having got the foot within grasp. The child was a male child. Admitting that the muscles of the uterus are the last to lose their rigidity after death, and supposing the impossibility (which I do not admit) of dilating a contracted os uteri so soon after death as may be necessary to save the child,—say a quarter of an hour,—the next resource is to pull down the neck of the uterus externally, and amputate it. This would occupy as little time, including extraction of the child, as the abdominal operation.

The opinion conveyed in this case, however sanguine, I am aware, must remain but an opinion until supported by subsequent fact and experiment. It will be interesting to be informed of the results of the experience of those gentlemen who may have frequent opportunities of making their own observations upon cases similar to the one under consideration.—I am, Sir, &c. HY. RAYNES.

Gringly, July 31, 1850.

IRREGULAR MATURATION OF THE VACCINE PUSTULE.

[To the Editor of the Medical Times.]

SIR,—I have lately seen some cases remarkable for the irregular and unusual influence of vaccine lymph, which, perhaps, are worth recording. In two healthy children of sisters, each inoculated with different matter, the pustules did not arrive at maturity till the tenth day. Again, in two healthy children of one mother, each child inoculated with matter from different sources, the pustules did not become matured till the eleventh day. We generally believe the pock to be invariably ripe after eight days have elapsed, and that lymph taken either before or after that time is innocuous. Whereas, I have successfully vaccinated with the lymph taken from these four children. I daresay some of your numerous readers, on perusing this, may call to mind similar unusual action.—I am, Sir, &c.,

Foles's Hill, near Coventry. R. LAFARGUE.

HUMAN MONSTROSITY.

[To the Editor of the Medical Times.]

SIR,—I am indebted to the kindness of my friends, the Messrs. Barker, surgeons, of Coleshill, for the opportunity of inspecting, on Thursday, July the 25th, a child which had been born on the morning of the preceding day; and had survived its birth two or three hours only.

The body of the child was fully developed, and of the average size; the head large, and the *dura mater* at the fontanelles distended by a large accumulation of serum. In the dorsal region existed a very large *spinal bifida*, from which the fluid had escaped through the rupture of the containing membranes and integument. *The lower limbs were closely and completely united from perinæum to heel, by common integument;* and by a curious contortion of these limbs, the soles of the feet, furnished with one little toe common to both, were turned upwards, thus occupying the ordinary site of the *dorsum* of these members. There existed not the slightest vestige of an anal orifice. With the rudiments of an imperforate *membrum virile* were seen faint traces of the labia of the female, and below them a depression simulating an orifice, which, however, afforded no passage to the slender instrument I endeavoured to introduce.

August 1, 1850. SHIRLEY PALMER, M.

PROGRESS OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—In your Number of Saturday last, appeared a statement, announcing the existence of Asiatic cholera in Liverpool. As the public papers have informed us that cases have occurred in Manchester, London, and Ireland, it might be supposed that we are in danger of another epidemic attack of the disease. I am inclined to hope that this is not the case. I therefore beg leave to call your attention to an important fact, that the latitudes of the route of the epidemic cholera are altered this year as compared with former years. In 1848 and 1849, the epidemic cholera engirdled the globe, between 40° and 60° north latitude. England was of course caught in the epidemic influence. This year the route is about 20° nearer to the equator, between 20° and 40° north latitude;—therefore I entertain a well-grounded hope, that England will be spared the profound affliction of another epidemic. With respect to the occult causes of this pestilence, I beg leave to observe, that I am of opinion, that all attempts to solve the problem, by ascribing an effect so universal with respect to the globe, to local causes, must fail. I will, however, offer an opinion, by way of approximation towards the manifestation of a great truth, and only regret that my limited abilities and leisure will not admit of a more perfect demonstration. It appears to me that the relative velocities of the central forces which govern the movements of the great polar cle-

ments circulating in the earth, have sustained, of late years, an important modification. So long as the standard equilibrium in the velocities was maintained, the elements would describe a circle in the earth. If a cause arises, destroying the adjustment of the velocities, the form of the orbit would be changed, and become elliptical, parabolical, or hyperbolical. If the velocity of the photicon be increased, so as to be in a less proportion than as the $\sqrt{2}$ to 1 its orbit becomes an ellipsis, if exactly in that proportion—a parabola. I conceive, therefore, that the latter configuration has been formed by a derangement in the standard balanced velocities of the central forces. The greater ordinate, rotating on the earth's centre at its point of junction with the abscissa of the parabola, would enable the lesser ordinate (described by an arc of the earth's periphery,) to perform that magnificent revolution through all the latitudes which appears so unaccountable to the observer. There is a distinction between the epidemic influence and the epidemic cholera. The former is defined by the extension of the parabola, and determined by the length of the ordinates. These vary with the collapse or expansion of the configuration. The area of the epidemic influence may therefore be ten, twenty, or thirty millions of miles, as determined by the length of the lesser ordinate. I am of opinion that in this great area the polarity of light is altered, which is the proximate cause of the epidemic cholera.

To stay the progress of the epidemic influence, we may therefore say, in the acceptation of the purest scientific and philosophic truth, that "vain is the help of man." Although we are powerless, either to hinder the progress of the pestilence when approaching, or to expedite its departure when present, yet we may do irreparable mischief by adopting measures which have a tendency to lower the standard of vitality in the presence of the epidemic influence; for then we predispose the people to receive its impression.

William John Thomas, M.R.C.S.

34, Cazneau-street, Liverpool, 5th Aug., 1850.

PAUPER PRACTICE.

[To the Editor of the Medical Times]

Sir,—The last number of the *Medical Times* contains a communication from Mr. Alfred Ebsworth, of Bulwell. He concludes by saying, "The above sentiments are, I believe, but expressions universal in the profession." Mr. Ebsworth assumes the sentiments which he expresses to be those of the profession generally. Against this assumption, however, I must, for one, enter a protest; and I caution those entering the profession, not to suffer themselves to be prejudiced by Mr. Ebsworth's advice, the unqualified adoption of which, if we may judge from the sample before us, would surely be detrimental to their interests, as well as in distinct opposition to their social duty. Mr. Ebsworth first warns any new comer against the acceptance of any Poor-law medical appointment, as sure to entail every possible evil, while, in the very next breath, he suggests, that he may make his fortune by the credit of curing a pauper patient, and "the life saved may be a soul gained." He inculcates, that every possible indulgence is to be shown to paupers, even in the shape of wine, fish, fowl, and ice." "Favour you the poor," is the first part of his dogma; and do your best to run-a-muck with "the niggardly overseer, the relieving officer, or the guardians," and finally with the Poor-law Board, is the second.

I say, on the contrary, that whoever takes the appointment as Poor-law medical officer, should only do so with a determination to do his duty fairly to all parties—to the guardians, his employers, to the paupers confided to his care, and often to his mercy, and to himself as a professional man and a gentleman. If we take the appointments,—and, alas! hard necessity often compels us to take and to retain them,—we are aware, at the time, of our remuneration, and of the responsibilities we incur—the duties we undertake. True it is, we are badly paid, and occasionally ill-treated. We have a right to do the best we can to improve our condition; but, if we meet with any special injustice, I am sure that we shall more often obtain redress by temperate and dignified remonstrance, than by bandying insult and abuse. If, however, we show attention to the legitimate views and wishes of the Poor-law guardians, to whom we are subordinate, and endeavour to conciliate them, there can be no doubt that, by so doing, we may realize more indulgence to the poor, and advantage to ourselves, than by too loudly asserting our importance and authority. Far be it from me to recommend any cringing subserviency to the vulgar and illiterate, or mean acquiescence with the sordid and unfeeling; but I do protest against our gratuitously assuming an antagonistic position and Quixotic line of conduct, whenever Poor-law guardians or parish officers are concerned.

Now, as to our relation with paupers, we must deal conscientiously with them in all respects. We ought to treat them with kindness, but that kindness must be tempered with firmness and judgment. It is our duty to apply our utmost skill for the relief of the sick pauper in all cases, and to afford him all necessary medicaments; but, at the same time, it is perfectly legitimate to observe economy in the selection of our medicines, to avoid unnecessary attendance and trouble, and to exert a somewhat strict control over the conduct of our patients. We ought to be prepared for all professional emergencies, and therefore self-reliant and willing to incur all requisite responsibility. In pauper practice this is of the highest consequence to reputation and success. Urgent cases must, of course, be promptly attended to; but, to avoid any unnecessary subsequent dispute, care should be taken in extra surgical or midwifery cases, to secure an order from an overseer, if the relieving officer be not at hand, as closely upon our first attendance as possible. With a little tact and management, there will rarely be any difficulty in so doing, and we may thereby avoid all subsequent cavil and collision. We should be most guarded in affording, or rather recommending, extra medical relief, nourishment, &c.; and we should be careful to measure it out in due proportion to the strict necessity of the case; to exceed that limit we have no right, nor can we conscientiously justify ourselves in so doing. We ought most cautiously to avoid interfering with general non-medical relief; to direct the attention of the relieving officer thereto, and to offer him any suggestion on the subject, are all we should attempt.

"Poverty is a public, not an individual charge," says Mr. Ebsworth. That it must be a public charge I acknowledge; but, where poverty results from crime or improvidence, it must also assume the character of a punishment, and not be fostered or suffered to press more heavily as a public charge than can be avoided. It is not for a union medical officer to promote pauperism, or to offer a premium for poverty in the shape of undue relief, medical or general. The medical officer occupies an important position, and may be the means of occasioning a large amount of pauperism,—let him bear this in mind as the spirit of the Poor-law, that while it may be to him a pride and pleasure to afford solace and assistance to the honest and industrious sick, it is a mere duty to afford them to the idle and vicious; and that, moreover, it is for him, as far as he is concerned, to see that relief be afforded to the latter only in due proportion to their necessity.

The new Poor-law is in many respects an admirable enactment, and we should not counteract its principles nor mar its utility by favouring its loose and careless administration. Far be it from me to decry the exercise of charitable benevolence, or to impose limits on kindly generosity; their free manifestation cannot, however, be derived from a legal enactment; and though I myself have always found them freely available as private sources, yet I have then often wished that even they could be subject to a little more method and organisation. I would fain see benevolent societies established by the wealthy and kind hearted in every town and village through the length and breadth of England as supplementary to the Poor-law establishments, so as to afford aid and comfort in affliction to their poorer brethren,—to encourage industry and providence,—and, in fine, to promote the moral and physical welfare of the lower classes as circumstances would best permit. Thus religion and civilization would best be benefited, and the unavoidable imperfection of the Poor-law might be made good.

The interest of my subject has caused me to extend my observations far beyond what I originally intended, but the purport of Mr. Ebsworth's communication seemed to me, in some respects, to tend to promote error in feeling, judgment, and action, and therefore to require reply. I should strongly recommend him to reconsider the subject, and beg to subscribe myself

A Poor-law Medical Officer of fourteen years' standing, and one who has been connected with four different Unions.

August 5, 1850.

CRANIOTOMY.

[To the Editor of the Medical Times.]

Sir,—Three hundred students were assembled in the theatre of St. Thomas's Hospital, many, many years ago, to see Astley Cooper perform the operation of trepanning upon a man who had met with an injury of the head. The great surgeon was operating with his usual dexterity, every eye was fixed upon him, when, all of a sudden, bang went the trephine into the substance of the brain. The patient kicked and struggled in convulsions, and was, in an instant, dead.

Cooper, self-possessed and cool, turned round to the class and said, "Gentlemen, this is a very important and instructive case. What has just occurred may be the means of saving hundreds of valuable lives. I am glad that there is such a full attendance of you here to witness it; and I trust it will be a warning to you all, and to all surgeons who may have to perform this operation, to be very cautious in proceeding, for you may meet with skulls like this man's, as thin as an egg-shell. Here the usual diplœ is entirely absent, and both tables united; yet together they are not thicker nor more resisting than an egg-shell. This you will all see at the autopsia that will be made to-morrow. You will also see in the museum that some skulls are much thinner than others; but *crania* so thin as this must be very rare, for this is the first I have met with. You, however, in performing this operation must recollect what has happened here, and act always as if you had in hand such a cranium as this."

Cooper was not only a great surgeon, but, in the fullest sense of the word, a great man. Nature had made him to arrive at eminence in any walk of life, and if he had been a lawyer he would, no doubt, have adorned the bench—perhaps the woolsack. He was never wanting in presence of mind; and here we find him cool and collected, and turning to a good account an untoward event that would have confused and upset most men.

That unfortunate operation has been, and ever will be, a lesson to surgeons; and perhaps has been the means of saving many lives. Thus good may have come out of evil—an accidental evil, certainly, for in this country we eschew the idea of doing evil, under any circumstances, that good may come therefrom. But when the evil has been done we are for making the best of it, and turning it, as Cooper did, to such an account as to produce good.

It is in this way that I would suggest to the profession to view and make use of Mr. J. S. Bartrum's craniotomy cases. Let them be made the means of convincing those in authority in the profession, and in the government of the country, that it is necessary to do something to regulate obstetrical education and practice, so as to prevent, so far as a comprehensive education and the test of a searching examination can go, the recurrence of such practice—a practice, I fear, now too prevalent all over the country. "The heads of the profession" may turn up their noses at midwifery as an inferior grade in the profession. I once heard the late Sir Charles Bell say, or rather teach, in his lectures, with great solemnity, that the tying of the navel-string was all the accoucheur had to do. I can assure them, however, that the man-midwife has often to meet the most trying cases in medical as well as in surgical practice, and is constantly called upon for the exercise of more judgment, skill, and discretion than is required by the hospital physician or surgeon in the most difficult of his cases. I have found it so myself; and, as I have practised as a surgeon, and also as a physician, having had to do with grave cases in both departments, my evidence on this subject is entitled to attention.

I look upon Mr. Bartrum's publication as a fortunate event. It is not often that such cases are published. We cannot penetrate into private, or even into public practice, in search of them; and generally, when they do occur, no one knows anything about them but the parties concerned; and they are discreetly allowed to rest in the silence of the grave. But here we have a publication that we can make use of without any breach of professional ethics; and when we find such a man as Mr. Bartrum, *a Fellow, by examination, of the Royal College of Surgeons of England*, putting forth such a publication to inform and instruct the profession, we are, in morality, and in justice to the community, and to place ourselves in a right light before our brethren in foreign countries, bound to take notice of it, and use it as a means to accomplish a desirable end.

When a Fellow of the Royal College of Surgeons pursues such a line of practice, and publishes it, what are we to expect from the junior and inferior members of the profession, into whose hands the medical care of the lower and industrious classes falls? It appears that Mr. Bartrum's cases were read at a meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association; but it has not transpired that they elicited any discussion. Are we to infer from this that the practice detailed was approved of by the meeting? There are usually at the meetings of that branch, men of professional eminence in the provinces; and one can hardly suppose that they would be so indifferent to humanity, and so shamefully apathetic, as to allow doctrines, in their opinion unsound, to pass current, and find their way into the journal of their Society without a dissentient remark. If such be their custom, where is the good of their meeting and hearing papers read? If such be their custom, they do far more harm than good by their assembling. Silence, they say, gives consent; and hence we may fairly assume, that Mr. Bartrum's practice, published upon a "calm review," was approved of by the Bath and Bristol branch of the Provincial Medical and Surgical Association.

You, Sir, have dissected and reviewed that practice in a very able, and, at the same time, in a mild and forbearing way. Your opinion of it is before the world, and whatever may be the result in the way of a reform in the midwifery branch of the profession, your remarks will be immensely beneficial, and, no doubt, will be the means of saving many valuable lives.—I am, &c.,

London, July 26th, 1850. M.D.

EIGHTEENTH ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION AT HULL.

The summonses by which the members of this long established Association were called upon to present themselves at Hull on the 7th inst., to celebrate the eighteenth anniversary, to receive the report of the Council, to transact other business, and, above all, to cultivate a friendly and cheerful spirit amongst themselves, by a fraternal and social intermingling, were most cheerfully responded to by members from all parts of the kingdom. Although Hull, a borough and seaport in East Yorkshire, is at least 170 miles north of London, medical practice was for the time being set at nought, or committed to the watchful care of a friend, and the facilities of railway travelling fairly tested. Every train brought in accessions to the swelling numbers of the Association. Among those present, we noticed Dr. Conolly, of Hanwell; Sir Charles Hastings, the Founder and President of the Association; Dr. Lyon, of Manchester; Dr. Mackness, of Hastings; Dr. Sibson, of London; Dr. W. Conolly; Mr. Newnham, of Farnham; Mr. Soden, of Bath; Mr. Stillwell, of Hillingdon; Dr. Robertson, of Northampton; Dr. Hodges and Dr. Tunstall, of Bath; Dr. Radclyffe Hall, of Torquay; Mr. Walshe, of Worcester; Dr. Paxton, of Rudgeley; Mr. Hare, of London; Mr. Hey, of Leeds; Dr. Williams, of York; Mr. Bottomley, of Croydon, &c. &c.

Nor were the authorities, the resident medical men, and the other inhabitants of Hull idle the while. In conjunction with the Council of the Association, arrangements were made to ensure, as far as practicable, the comfort of the visiters to the ancient borough-town of Hull on this august occasion. Hull is not devoid of many objects of interest, admission to view which was afforded the members by a printed card, a copy of which is now lying before us. The museum of the Literary and Philosophical Society, the Infirmary, Hull flax and cotton mills, Kingston cotton-mills, the citadel, baths and wash-houses, water-works, Trinity-house, Subscription Library, Botanic Gardens, Zoological Gardens, and Blundell's oil-mills, were all liberally thrown open. A man with an inquiring mind might easily, and with benefit to himself, while away an hour or two in the examination of the many interesting objects thus brought under his notice. Beverley Minster, Brocklesby-park, and Thornton College, were also mentioned in the card as worthy a visit.

The president, Sir Charles Hastings, M.D., on taking the chair, was greeted with long-continued applause, the members appreciating the honour recently conferred on him by the Sovereign, not merely as a testimonial of the high esteem in which the knight himself is held for his acquirements and his services to the profession, but also as a mark of honour conferred on the Association itself. Sir Charles Hastings, after making a few remarks, resigned the chair to the new president, Dr. Horner, who, in a graceful address, welcomed the members of the Association to Hull, the ancient mart of commerce, or, as it might be designated, the town of freedom and integrity. Freedom was emblematised by the statue of Wilberforce, and Integrity by Andrew Marvel. In the course of his observations, Dr. Horner paid a just tribute to the character of their late vice-president, Dr. Crosse, of Norwich; and then, for the benefit of the visiters, described the various public institutions of the town which were worth their attention, and showed by their number and extent, that Hull was entitled to a high reputation for its works of benevolence, as well as for those intended for the furtherance of science, the arts, and manufactures. Dr. Horner's speech was received with great applause.

The Report of the Council was then read, of which, at this late period of the week, we can only give an abstract.

The Council commenced by congratulating the members on meeting in a new district, where they had already many members, who had manifested great interest and zeal for their success, and trusted that the proceedings of that day would tend greatly to increase their numbers. The cause of the Association, during the past year, had been prosperous, and the objects for which it was instituted steadily and zealously pursued. Events have occurred which have already shown the utility of the Society. As long as the medical polity remains in its present defective state, the existence of such an Association is particularly necessary, in order that defective medical legislation may not lead to disruption amongst the several classes that constitute the profession, instead of that harmony and good feeling which ought ever to distinguish a liberal profession. The number of enrolled members is 1800. Two new district branches, the North Wales and the Dorsetshire, have been added, each paying its own district expenses: their rules have been examined and approved. Dr. Ranking, of Norwich, and Mr. Walsh, of Worcester, have been appointed the editors of the Journal, and the Council stated, that the duties of the important and laborious office had been so well performed, that they hoped the appointment would be confirmed by the meeting. No volume of "Transactions" had appeared, in consequence of unavoidable causes having delayed the reception of important communications, but a promise was held out, that soon after the meeting a volume would be issued, which would contain some of the papers read at this meeting.

The question of medical reform has occupied the attention of the Council during the present year; hopes were entertained that the difficulties attending it might be adjusted, but, as on all previous occasions, disappointment was the only result. A circular was issued by the Council to the district branches, requiring information respecting the views of the members, and the answers sent in were embodied in the following memorial, which was presented by the President to Sir George Grey:—

"1st.—That the only principles which will be satisfactory to the profession are the following:—

"Uniform and sufficient qualification in every branch of medical science; equal right for all so qualified to practise throughout Her Majesty's dominions, and the adoption of the representative principle in the formation of the Councils or governing bodies.

"2nd.—That in order to carry out these principles it is desirable, that the Colleges of Physicians and Surgeons should be re-modelled, giving to all members, without other restriction than that of respectability and good character, a vote in the election of officers, and in the general management of their affairs.

"3rd.—That after such re-modelling of the constitution of the existing Colleges, it is also desirable to appoint a joint board of physicians and surgeons, with the aid, if necessary, of competent examiners in midwifery and pharmacy, who shall examine every candidate desiring to enter the profession in medicine, surgery, midwifery, and pharmacy, and shall, on his passing such examination to their satisfaction, issue a diploma or license to practise all or any of these branches of the profession, in any part of Her Majesty's dominions.

"4th.—That subsequently only to the granting of the above diploma or license, and under such regulations as may be considered necessary, every such licentiate shall be entitled to present himself for examination to the respective Colleges of Physicians and Surgeons, who shall, if he be found duly qualified, grant such further title of honour as may be thought expedient.

"5th.—That your memorialists are unanimous in opposing the establishment of a new College of General Practitioners, believing that it would add a fresh element of confusion and discord, and that it would tend to lower the *status* and inefficiency of the surgeons engaged in general practice, of which this Association is chiefly composed. But if difficulties of an insurmountable nature should prevent any other settlement of the claims of the general practitioners, your memorialists submit that a considerable section of the Provincial Medical and Surgical Association look to the establishment of the proposed new college as a last resource.

"6th. That your memorialists have reason to believe that the Colleges of Physicians and Surgeons are ready to undertake the examinations as above proposed, and that the Society of Apothecaries have very laudably expressed their willingness to resign into competent hands the management of the examination in medicine and pharmacy, which they have undertaken since the year 1815, but which your memorialists consider can only be carried on with satisfaction to the profession and justice to the public, as a part of a general examination, which should be compulsory on all parties entering the medical profession.

"7th. Your memorialists therefore pray that you will be pleased to advise Her Majesty to grant a new charter to the Colleges of Physicians and Surgeons, on the principles above defined, which have been so long advocated in all other corporations by Her Majesty's present Government; and that you will, in addition, introduce such a Bill during the present session of Parliament as will carry into effect the education and examination of the surgeons engaged in general practice, by means of the existing institutions; which plan, your memorialists believe, will materially advance the interests of the public, by providing well-qualified medical practitioners, and will satisfy the wants of the great mass of the profession, and especially of the large number of surgeons engaged in general practice represented by your memorialists."

The state of the finances was reported to be prosperous. At the last meeting there was a balance in hand of 16*l.* 2s. 6d., receipts 1616*l.* 4s. 2d., giving a total of 1632*l.* 6s. 8d. Expenditure 1522*l.* 8s. 2d., leaving a balance in hand of 109*l.* 18s. 6d. In many instances arrears have been collected, but there are still many members who have not paid their subscriptions for several years.

The Arsenic Committee have communicated with the Committee of the Pharmaceutical Society; and the following resolutions have been adopted:—

"1st. That the sale of arsenic by retail shall be restricted to chemists and druggists, and apothecaries.

"2nd. Arsenic should only be sold to male adults known to the vendor, or to their written order.

"3rd. The vendor should enter the sale in a book, with the date and the object for which it is required, to which the applicant and a witness, one or the other known to the vendor, should sign their names, unless a written order be brought in a handwriting known to the vendor, which order should be posted in a book."

A memorial to the Secretary of State, and petitions to both Houses of Parliament based on these resolutions have been presented. [A Bill to restrict the sale of poisons will be introduced by Government next year.—*Rep.*]

The monument to Jenner is in progress. Mr. Marshall hopes to have a cast finished for the exhibition of 1851, and the work completed in bronze in 1852. At present steps have not been taken to raise subscriptions for this purpose; but the Council trust that the feelings of the profession and the public will be warmly roused when appealed to.

The code of ethical rules, preparing by the Committee, will not be ready until after the meeting has terminated. The Poor-law petition was duly presented to Parliament.

Many valuable communications on cholera have been received, and forwarded to Dr. Williams, of Worcester, who has made an abstract of them, to be read at the anniversary, and afterwards published in the "Transactions."

The Benevolent Fund has made progress during the year, and the Council trust the report will be satisfactory.

Mr. Hatton, of Manchester, proposes the following alteration of Rule 24:—

"But if any member's subscription remain unpaid, twelve months after it shall have become due, the *Medical Journal*, and other publications of the Society shall be withheld from such member until his arrears be paid; and when any member has been in arrears of subscription for the space of three years, application shall be made for the same by the General Secretary, and if the arrears be not paid in one month, the name of that member shall be erased from the list of subscribers; but this erasure shall not be deemed, either in honour or in equity, as releasing any gentleman from the subscriptions owing during his membership."

Dr. Cooper then read the retrospective address in medicine, and various other communications of a medical character were submitted to the meeting.

Mr. Newnham gave a most gratifying statement of the progress of the Benevolent Fund.

After the meeting was over, the members of the Association availed themselves of the invitations, hospitably and lavishly given by the resident practitioners.

ABSTRACT OF A BILL FOR THE INCORPORATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

INTRODUCED BY MR. WYLD AND COLONEL THOMPSON.

The preamble recites the class of persons acting as general practitioners, defining them to be persons, not of the degree of physicians, who combine the practice of medicine, surgery, midwifery, and pharmacy, being members of the College of Surgeons, and licentiates of the Apothecaries' Society, (unless in practice before the 1st of August, 1815). They also practise the art or science of midwifery, the Legislature not having made any provision to ascertain their skill and ability therein. It then states, that such persons are known in law as surgeon apothecaries, or surgeons and apothecaries, but are of late years better known as general practitioners. It then proceeds: "And whereas the necessities of a large portion of the population of England and Wales imperatively require the existence of a well-educated and numerous class of persons competent to practise all branches of the medical profession, and to minister to the sick in all emergencies: and whereas, in order the more effectually to promote and encourage the study of medicine, surgery, and midwifery, and to provide an adequate supply of such well-educated and well-qualified medical and surgical attendance for all classes of the population in England and Wales, it is expedient that the surgeon apothecaries, or general practitioners, should be united into one body politic and corporate, with power to appoint a Court of Examiners to examine all persons who shall hereafter desire to practise as 'surgeon apothecaries' or 'general practitioners,' as to their competency to practise in that capacity, and to grant or withhold letters testimonial of the fitness and qualification of such persons to practice as surgeon apothecaries or general practitioners." It then provides for the admission into the body corporate of all persons practising as general practitioners without the double qualification, such as members of the College of Surgeons only, licentiates of the Apothecaries' Society only, and other persons not authorized by law to practise either as surgeons or apothecaries in England or Wales, but legally authorized to practise either as physicians, surgeons, or apothecaries in some other part of the United Kingdom, and repeals the Apothecaries' Act of 1815, except so much of it as confirms such parts of the letters patent of James I., granted to the master, wardens, and Society of Apothecaries, as were not repealed by that Act, and also repeals the Act passed in the sixth year of George IV., amending the Act of 1815,—but so as not to revive any Act or Charter repealed by those Acts.

Clause 2 provides for the incorporation of the new college by the name of "The Royal College of General Practitioners in Medicine, Surgery, and Midwifery of England," with power to sue and be sued, plead, and be impleaded in all courts and before all justices and others.

Clause 3 provides for the College having a common seal, with full power to break, alter, or make anew the same.

Clause 4 provides that the College shall have a common hall in London, Westminster, or elsewhere, and that they may possess hereditaments not exceeding the yearly value of 5000*l.* at any one time.

Clause 5.—The said college to consist of an unlimited number of members, governed by a president and council.

Clause 6. provides that every person in practice as an apothecary on the 1st of August, 1815, or who, before the passing of this Act, shall acquire the right to practise as an apothecary by virtue of the Act 6 of George IV., and every licentiate of the Apothecaries' Society, and every general practitioner in actual practice at the time of this Act passing, being a fellow, licentiate, or extra-licentiate of a British College of Physicians; or a fellow, member, or licentiate of a British College of Surgeons; or an M.D. or M.B. of a British University, within twelve calendar months after the passing of the Act, if resident in the United Kingdom, or if not, within two years, may cause his name to be enrolled as a member of the said College, on payment of a fee of for the use of the College.

Clause 7 provides, that the names of all those qualified persons who may signify in writing, to the registrar of the College, their desire to become members within the first calendar month, shall be set forth on one general diploma under the seal of the College, and enrolled in the High Court of Chancery, the priority of names being according to priority of admission into the College, the Council to decide in doubtful cases. The same proceeding to take place each month till the end of the twelfth calendar month; the admittanee of every other member to be by a separate diploma under the seal of the College.

Clause 8 provides for the admission of candidates by examination, and the age—22 years—at which they are admissible.

Clause 9 provides, that candidates on admission pay a fee not exceeding the sum of , as the Council shall determine.

Clause 10 authorises the Council to admit as members without examination, but on payment of a fee, M.D.s or M.B.s of a British University, graduates or licentiates in medicine of the Universities of Oxford or Cambridge, and members of the College of Physicians, London, provided such persons be twenty-two years of age, produce proof of five years' study in conformity with the College regulations, and the examinations previously undergone be of a standard at least as high as that of the College of General Practitioners.

Clause 11 provides for the keeping a register of the members, with their several places of abode, and dates of diplomas or letters testimonial, a copy of such register to be published six months after the passing of the Act, and every twelve months afterwards.

Clause 12 requires, that every person so registered shall send in every February to the Council, his name and place of abode, and change of residence, if any, with the date of his diploma or letters testimonial, under the penalty of omission of his name from the register; and it further provides, that a printed copy of the register shall be evidence in a court of law, that the person specified is duly registered, and the absence of the name shall be evidence, until proof to the contrary, that such person is not registered under the Act.

Clause 13 provides that the Council shall consist of forty-eight members, twenty-four of whom shall reside within ten miles, by highway or road, of the General Post Office.

Clause 14 appoints the president, and renders him eligible for re-election when the term of office has expired, the said term being for three years. The president is *ex officio* a member of the Council.

Clause 15 appoints the Council, and that one-third town and one-third country members shall go out of office in the order in which the Council shall appoint, and not be re-eligible until the year following.

Clause 16.—The Council to be elected by a majority of votes of members as have been such for five years, or have held the diplomas or licenses by which they became members of the College for that time. The members may vote personally, or by proxy in writing. The councillors elected to serve for three years; but if a town-councillor cease to reside within the ten miles, he, *ipso facto*, ceases to be a member of the Council, the acts of the Council in which he may have concurred not being invalidated thereby.

Clause 17 appoints three vice-presidents from the Council, to be elected by them, fixes the term of office, and fills up vacancies. The senior vice-president to act as president in case of vacancy until a new one be appointed.

Clause 18.—President and members of Council must be members of fifteen years' standing, or must have held the diploma by which membership was obtained during that time.

Clause 19 provides, that when a vacancy occurs during the period of office in the presidency or membership of Council, such vacancy is to be filled up by the Council, the substitute holding office for the remainder of the term only. If, however, there be a vacancy in a town-councillorship less than twelve calendar months before the election, the substitute is to be re-eligible.

Clause 20 provides, that if the election for president or Council do not take place on the day appointed, the persons holding office retain it until their successors be appointed, and a fresh day of election must be named.

Clause 21 gives the Council the management of the College property, the power to grant diplomas or letters testimonial; to make and alter by-laws, rules, and orders for the governance of the College; to direct the course of study of candidates, and the particulars of their examination; to impose reasonable fines, penalties, and amerciaments on recusants, and to appoint or remove the treasurer, registrar, secretary, and such other officers, clerks, and servants, as may be required.

Clause 22 appoints the calling a general meeting of the members within six months of the passing of the Act, to consider and review the by-laws, &c., and to confirm, alter, or annul the same, and annual meetings for future by-laws; also other general meetings as may be required, and appoints the president, senior vice-president, or some member of the Council chairman, with a second or casting vote.

Clause 23 appoints that no by-law is valid unless approved by the Home Secretary.

Clause 24 requires, that in all medical and surgical schools the students shall be duly registered annually, the fee for which shall be 2s. 6d., to be remitted to the College for the purposes of this Act, and no student to be admitted for examination without certificates of such registration. The Council may dispense with this clause in the case of students who commenced their studies before the passing of this Act.

Clause 25 appoints examiners, to be presided over by the president, one of the vice-presidents or a member of council, but neither the president nor councillors can be examiners.

Clause 26 provides, that if any member obtained his diploma by fraud, false statement, or imposition, or be subsequently convicted of felony, or of having wilfully given a false certificate, or wilfully violated any by-law of the College, then after previous notice to, or hearing of any member so accused, the Council, with the consent of three-fourths of its members at a special meeting, may censure, suspend, or wholly expel such member, the name to be erased from the register, and not re-inserted unless by special license of the Council.

Clause 27.—No surgeon apothecary, unregistered under this Act, to be appointed to any medical or surgical office under the Poor-law, or to any hospital, prison, infirmary, dispensary, school, workhouse, or other public institution in the United Kingdom, subject, however, to the reservations hereinafter contained. When by law it is provided that any act shall be done by a physician, surgeon, or apothecary, or medical or surgical practitioner, such provision shall be construed to mean a member of the College of Physicians or Surgeons, or a person registered under this Act. Persons registered as belonging to this College to be exempt from serving on juries or inquests, and all corporeal, parochial, ward, hundred, and township offices; no general practitioner to be so exempted unless so registered, and the certificate of an unregistered person not to be received in any court of law.

Clause 28 provides that persons so registered may take reasonable fees for medical and surgical advice and attendance, and for medicines prescribed or administered by them; and after the passing of this Act, no person to be so entitled unless thus registered, or unless he prove himself to have been legally practising in the capacity in which he makes the charge, before the passing of the Act.

Clause 29 directs a penalty of 20*l.*, after the passing of the Act, for every unregistered person wilfully practising in any medical or surgical office for which he is not legally qualified, the said penalty to be recoverable in any of Her Majesty's Courts of Record in Westminster, in any County Court, or in the Court of Exchequer in Scotland or Dublin, within six calendar months after the commission of the offence, in the name of Her Majesty's Attorney-General for England or Ireland, or of the Lord Advocate for Scotland.

Clause 30 directs a penalty of 20*l.*, or imprisonment, for every general practitioner practising without being registered, falsely pretending to be registered, or assuming a title as so registered, the penalty to be applied to the use of the College, persons previously legally qualified being exempted from the operation of the Act.

Clause 31 explains, that, in this Act, the term surgeon-apothecary, or general practitioner, means all qualified persons practising medicine as apothecaries, or medicine and surgery, with or without midwifery; the term Council means the President and Council for the time being; words importing the singular include the plural, and *vice versâ*.

Clause 32 provides that this Act be a public one, and judicially noticed as such; and

Clause 33 provides for its amendment, or repeal during this present session.

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS.—August, 1850.

FIRST EXAMINATION.

1. Explain shortly the nature of chemical affinity, and give two or more examples.

2. In what manner is phosphorus usually obtained? and what compounds does it form with oxygen?

3. Explain the nature of the change effected upon sugar during the vinous fermentation.

4. Give one of the usual processes for the preparation of iodide of potassium.

5. Classify the most important mineral waters according to their composition, giving one or two examples of each variety. Describe briefly their actions and uses.

6. Mention the effects, uses, and mode of administration of elaterium, strychnia, monkshood, aconitina, [Aconita *Ph. Ed.*,] gallic acid, nitrate of silver, the iodides of mercury, and the arsenious solution of the British Pharmacopœias.

7. What is copaiva? Describe its actions and uses. Write (without using abbreviations) a Latin prescription for a mixture suitable for an ordinary case of gonorrhœa, and containing copaiva and spirit of nitrous ether.

To be Translated into English.

Sonorum immensa varietas est: quippe quorum vel levissimæ mutationes et conjunctiones ab acuta et docta aure percipiantur. Insignis quoque eorum vis est in animum hominis, et ideo in corpus. Varios animi affectus, tristes imprimis et lætos, inspirant; multique hominum ex hoc inexhausto fonte puras et suavissimas voluptates hauriunt. Auris vero, quæ vocatur musica, non omnibus datur; cujus rei ratio hactenus latet. Nullo modo pendet ab acutiore vel obtusiore auditu. Semi-surdi nonnunquam musicæ satis periti sunt et amantissimi, qua bene audientes parum sæpe fruuntur; et vir, auditu integro manente, aurem suam musicam, quam eximiam habebat, subito et sine nota causa amisit. Neque ratio ulla est cur defectum talem inæquali per binas aures auditui imputemus. Facultas ipsa Naturæ donum est, nullo studio acquirenda: cultu vero et usu, non secus ac reliquæ hominis facultates, mirum in modum acuitur et roboratur. Auditus fere omnium sensuum sæpissime vitiatur; quod profecto nil mirum; scilicet, quia organum habet delicatissimum, et ex plurimis et valde minutis partibus compositum.

SECOND EXAMINATION.

1. Give a classification of the different kinds of food, stating the uses of each class in the animal economy. What do you consider to be the quantity of solid food necessary for a healthy adult? Give the symptoms, and appearances after death, in cases of starvation.

2. Describe the course of the left subclavian artery, mentioning its most important connexions, and the branches which it gives off.

3. Describe briefly the anatomy of the pneumogastric nerve, pointing out the difference of its course on the right

and left side. Mention the most important functions of this nerve, and name some of the diseases or morbid conditions of the system in which you suppose it to be involved.

4. Describe the duodenum, the nature of the secretions which are poured into it, and their influence in the process of digestion.

5. Give a sketch of the physical and chemical characters of healthy urine, mentioning the average amount of urea and uric acid excreted in twenty-four hours. What effect is produced on the urine by the administration of benzoic acid?

6. Mention the peculiarities of the fœtal circulation. State what you conceive to be the principal office of the placenta. Describe the nature and causes of the sounds which are heard on auscultating the uterine region during pregnancy.

THIRD EXAMINATION.

1. Describe the different modes of death, mentioning their symptoms and some of the diseases in which they respectively occur. What are the most frequent causes of sudden death?

2. Give a description of the paroxysm in hysteria, and contrast it with that in epilepsy. Mention the diseases most commonly simulated by hysteria, and show how the true nature of these cases may be detected. Give a sketch of the general principles of treatment both during the hysterical paroxysm and in the interval.

3. Describe the organic causes and the treatment of pulmonary hæmorrhage.

4. Describe the causes, symptoms, and treatment of abscess of the liver, and mention some of the courses which the pus may take.

5. Give a sketch of the causes, symptoms, and treatment of erysipelas of the face and head. Mention the different ways in which it may prove fatal.

6. What are the causes, symptoms, and treatment of stricture of the rectum?

7. Mention briefly the symptoms and treatment of secondary syphilis.

8. Describe the symptoms of abortion, and the treatment of them.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, August 2.

Allen, James Bedford, Ilminster, Somersetshire.
Ayre, William Gordon James, Plymouth.
Ball, Tertius, Plymouth.
Cooke, George, Attfield, Bath.
Draper, William, Woburn-square.
Dukes, Major Charles, Aeton-place, Kingsland-road.
Hutchinson, Jonathan, Selby, Yorkshire.
Ingle, Matthew, London.
Johnson, Thomas Potter, Congleton, Cheshire.
Leaeh, Robert, Martock, Somersetshire.
Rugg, George Philip, Maidstone.
Walker, William Henry, Loughgall, County Armagh, Ireland.
Warren, Henry Charles, Milverton Somersetshire.
Willett, Edward Sparshall, Norwich.

At the same meeting of the Court, Mr. John Jolliffe passed his examination for naval surgeon; this gentleman had previously been admitted a member of the College, his diploma bearing date December 20, 1844.

Tuesday, August 6.

Chambers, John, Trafalgar-place, Hackney-road.
Fitzgerald, Thomas George, London.
Howell, Thomas, Finsbury-place.
Hunt, Edward, Hampstead's, Bacup, Lancashire.
Jakins, Isaac Negus, Osnaburgh-street, Regent's-park.
Lancaster, Thomas, Radeliffe Bridge, near Manchester.
Nelson, Henry, Windham-plaee, Bryanstone-square.
Rigby, John, Preston, Lancashire.
Stephenson, James, Devonshire-street, Globe-road, Mile End.
Thomas, John Henry, Llensamlet, near Swansea.
Thornton, Hastwell, Cottingly House, Bradford, Yorks.
Tinsley, William Walter, Sedgeley, near Dudley, Staffordshire.

Naval Appointments.—Surgeon Henry Liddell (1841) to the Trafalgar, 120, at Shecrness. Assistant-Surgeons: John Jeffcott (1842) and William B. Dalby (1846) to the Trafalgar; Frederiek Morgan (1843) from the Southampton, 50, on the south-east coast of the American station, to the Fox, 42, at Portsmouth; Francis Anderson (1845) from the Southampton, at the Cape of Good Hope, to the Crane, 6, brig, at Devonport. Surgeon John Robertson, M.D., (1834), to the flag-ship at Pembroke; Thomas H. Keown, (1841), to be surgeon-superintendent of the Hyderabad; Surgeon H. J. Domville (1846) and Assistant-Surgeon W. M'Dermott, M.D. (1840) to the Dragon steam-frigate, at Portsmouth.

Military Appointments.—37th Foot.—Staff-Surgeon of Second Class, John Charles Cameron, M.D., to be Surgeon, vice Alex. Browne, M.D., who retires upon half-pay. 44th Foot.—Staff Assistant-Surgeon, John Gibbons, to be Assistant-Surgeon, vice Gray, deceased. 2nd West India Regiment.—Staff-Surgeon of the Second Class, George Allman, to be Surgeon, vice William Henry Brownson, who retires upon half-pay. Hospital Staff.—Staff-Surgeon of the First Class, Daniel Scott, to be Deputy-Inspector-General of Hospitals, vice John Wm. Watson, M.D., who retires upon half-pay; Staff-Surgeon of the Second Class, John Mair, M.D., to be Staff-Surgeon of the First Class, vice Scott, promoted; Surgeon John Gillespie Wood, M.D., from the 20th Foot, to be Staff-Surgeon of the Second Class, viee Mair, promoted; Surgeon Henry James Schooles, M.D., from half-pay 69th Foot, to be Staff-Surgeon of the Second Class, vice Cameron, appointed to the 37th Foot; Surgeon Duncan Menzies, from the 6th Foot, to be Staff-Surgeon of the Second Class, vice Allman, appointed to the 2nd West India Regiment; Assistant-Surgeon William Sedgwick Saunders, M.D., from the 7th Foot, to be Assistant-Surgeon to the Forces, vice Gibbons, appointed to the 44th Foot.

University College Hospital.—At their meeting on Thursday last, the Council of the College appointed Mr. Wharton Jones to the offiee of ophthalmic surgeon, and Mr. Cadge to that of assistant-surgeon to the Hospital. Dr. Foucart and Mr. Haynes Walton, well known to our readers by admirable papers on Ophthalmic Surgery, published in our journal, were, we understand, candidates for the former appointment, and Messrs. Palmer, Foucart, Chippendale, senior surgeon to the Farringdon Dispensary; Lonsdale, of the Orthopædic Institution; Morris, of the Spalding Infirmary; Norman, of the St. Marylebone Dispensary; and Maelise, the author of the work on Surgieal Anatomy, for the latter. Professor Quain, by whose resignation the office of ophthalmic surgeon became vacant, has been made eonsulting ophthalmie surgeon.

Obituary.—At Cheltenham, on the 5th inst., James M'Cabe, M.D., aged 59.—On the 28th ult., at Fareham, Hants, James Ainge, Esq., surgeon, aged 63.—On the 30th ult., at Aberystwith, in his 44th year, William Thompson, Esq., surgeon, of Kingston, Herefordshire.—At St. Andrew's, on the 11th ult., Patrick Mudie, M.D.—On the 13th ult, at Dalswinton, Dumfriess-shire, Henry Paterson, Esq., surgeon, aged 39.

University of St. Andrews.—List of gentlemen who had the degree of M.D. conferred upon them 3rd of August, 1850:—William David Adams, M.R.C.S., Ed., Edinburgh; John M. Ballenden, L.A.C., Eng. and M. Facult. Phys. and Surg., Glasgow, Staffordshire; George Phillips Bevan, Breconshire, S. Wales; Walter Thompson Boddy, M.R.C.S., Eng., London; John Young Bown, M.R.C.S., Ed., Canada; John Campbell, M.R.C.S., Eng., L.A.C., Lisburn, eo. Antrim, Ireland; Richard Chapman, M.R.C.S., Eng., Yorkshire; Thomas Clarke, M.R.C.S., Eng., L.A.C., Bradford, Yorkshire; William Simpson Craig, M.R.C.S., Ed., Edinburgh; John Thomas Dolman, M.R.C.S., Eng., L.A.C., York; William Dean Fairless, M.R.C.S., Eng., Hexham, Northumberland; Richard Ford Foote, M.R.C.S., Eng., Faversham, Kent; Joseph Wileox Haddock, L.A.C., Bolton-le-Moors, Lancashire; Joseph Hewitt, M.R.C.S., Eng., L.A.C., Ipswich, Suffolk; Thomas Coke Higgs, L.A.C., St. George's, Bermuda, W. Indies; James Harvey Lilley, M.R.C.S., Eng., L.A.C., Wisbeach, Cambridgeshire; Andrew Lorimer, Dumfriesshire; John Lyell, M.R.C.S., Ed., Newburgh, Fife; Henry Madge, M.R.C.S., Eng., L.A.C., Clovelly, Devon; Robert Slater Mair, M.R.C.S., Ed., Renfrewshire; Charles Robbins Maxwell, M.R.C.S., Eng., Middlesex; Alfred Peskett, M.R.C.S., Eng., L.A.C., Petersfield,

Hampshire; Benjamin Francis Popham, M.R.C.S., Ireland, Dublin; Robert Rooke Prance, M.R.C.S., Ed., Hamstead, Middlesex; William Richardson, A.M., M.R.C.S., Eng., London; Robert Ripley, M.R.C.S., Ed., Whitby, Yorkshire; Edward Scanlan, M.R.C.S., Eng., London; John Thomas Small, M.R.C.S., Ed., Toronto, Canada; Alexander Macfie Smith, M.R.C.S., Ed., Lanarkshire; Hugh Thomson, M.R.C.S., Ed., Renfrew; George Brown Turner, M.R.C.S., Eng., L.A.C., London; Henry Noble Watson, L.A.C., Clitheroe, Lancashire; James Whitehead, F.R.C.S., Eng., Manchester.

Testimonial to Dr. Conolly.—A meeting was held Saturday, Aug. 3, at 12, Old Burlington-street, Lord Ashley in the chair, to take the necessary steps to present Dr. John Conolly, of Hanwell, with a public testimonial, commemorative of his labours in ameliorating the treatment of the insane; and a Committee was appointed to carry the resolutions of the meeting into effect. It was resolved that the form of the testimonial should be a portrait, to be presented to Dr. Conolly's family, and an engraving from the same to be presented to the subscribers. The subscriptions are to be limited to five guineas; subscribers of two guineas and upwards are to be entitled to proof impressions of the engraving, and subscribers of one guinea to prints. Sir James Clark and Dr. Little were appointed treasurers, and Dr. Forbes and Mr. Frankum, secretaries.

Dr. Heilbut, a surgeon serving with the insurgent forces under General Willisen, was desperately wounded in the battle of Idstedt; all the other surgeons, on both sides, escaped unhurt.

The French Government have suppressed the Marseilles Board of Health, and have refused to sanction quarantine.

Assistant-Surgeons in the Navy.—The following circular has been forwarded to all flag-officers, captains, &c.—"Admiralty, July 17, 1850: My Lords Commissioners of the Admiralty are pleased to direct that the following regulations be established with reference to the rank and position of the assistant-surgeons of the Royal Navy: 1st. Assistant-surgeons are to be divided into two classes. 2nd. The first class is to consist of all those who have completed three years' servitude from the period of their first entry, one year of which, at least, must be on board a commissioned ship, and the other two may be served in one of Her Majesty's naval hospitals, and who have passed their examination for surgeon either at home or abroad, as directed by the Admiralty instructions, (chap. ii. art. 26, p. 25;) but, in case the service on which the ship may be employed, should render it improbable that three surgeons can be assembled for a considerable period of time, then the captain may give an order to the surgeon of the ship to examine the assistant-surgeon whose period of time has expired; and, if found competent, may grant him a temporary certificate, until the requisite officers can be assembled. 2nd. Assistant-surgeons who may have served more than three years, and have passed the examination for surgeons under the above conditions, are to rank next to naval instructors, are to mess with the ward-room officers, and to be allowed cabins on board, when the accommodation and space on board will admit. 4th. The second class of assistant-surgeons is to consist of all those who have not served three years, and those who have not passed their examination for surgeons. 5th. The cabin specified in their Lordships' order of the 26th Feb., 1846, is to be strictly appropriated to the officers mentioned in that order, and their Lordships' instructions on that head are to be fully carried out. 6th. First-class assistant-surgeons who may be serving in small vessels, commanded by lieutenants, are to mess in the gun-room with the other officers. 7th. The above regulations are to be carried into effect on the receipt of this circular order.—By command of their Lordships. J. Parker. To all flag-officers, &c."

Dr. Davey's Appointment at the New Colney Hatch Lunatic Asylum.—Dr. Davey has been appointed Resident Medical Superintendent at the New Colney Hatch Lunatic Asylum, having recently returned from having charge of the Government hospital for the insane at Ceylon. In reviewing his work on the pathology of the brain, we suggested that he was in every respect well qualified for such an appointment; and we may now, therefore, be fairly expected to congratulate him on his success, which we do with pleasure, but not without some misgiving, for we have since heard that he is one of those digital philosophers who believe in phrenology and profess to have faith in the more pernicious heresy of mesmerism. In other words, Dr. Davey is a phreno-mesmerist; but we hope we have been misinformed, for a man who holds so responsible an office ought to enjoy an amount of public confidence which never will be awarded to any one, however scientific he may be, who becomes notorious for his credulity. Phrenology is a very innocent pastime, and we should no more dream of disputing seriously the pretensions of any person professing to interpret character by phrenological signs, than we should think of lecturing a child for playing with a Chinese puzzle. It is amusing enough to play at hit or miss in divining a lady's character, by running ones fingers through her glossy ringlets and braided hair, more especially if rewarded for our pains, as Juvenal says the Roman ladies did the metoposcopists who practised this art even in the days of Vespasian,—

"Præbet frontem manumque Vates *propysma* roganti."

But mesmerism is a very different affair. Here the mystic manipulations of the operator, by fatiguing and exhausting nervous sensibility, superinduce — particularly in females disposed to hysteria—that well known state of coma in which the mesmeriser, from the insensibility of the patient, may truly boast that he can do what he pleases. Truly, it is a profound mesmeric slumber; but "in that sleep what dreams may come?" Phrenology is little more than an agreeable drawing-room plaything; but mesmerism, from the demoralising results which have attended the practice of it, ought to be excommunicated for ever from the circle of our social life. We, of course, do not make these remarks with the most distant idea of any personality towards Dr. Davey; he now holds a situation of high public trust and responsibility, and we feel assured, that he will not tamper with the confidence that has been reposed in him. With these feelings, we wish him every success in his new office; he has already had much experience in the organisation and management of lunatic asylums, and when he considers how much remains yet to be done, in order that these establishments shall be placed upon a better footing than they are at present in this country; and when he reflects how little is yet known of the pathology and proper treatment of insanity, he will find a field open before him which will demand his incessant and anxious exertions, and in the midst of such important occupations, he will—we would fain believe—forget the fictions of phrenology and the dreams of mesmerism.

HEALTH OF LONDON DURING THE WEEK.

The mortality of London exhibits a continued disposition to increase. The deaths which, in the three preceding weeks, were successively 781, 863, 898, rose, in the week ending last Saturday, to 917. In the ten corresponding weeks of 1840-9, the lowest number of deaths occurred in 1841, and was 759; they rose in 1846 to 1086, and, during the prevalence of cholera last year, they were 1967. The average of the ten corresponding weeks is 1021, or augmented in the ratio of increase of population 1114, compared with which latter number, the return of last week shows a decrease amounting to 197. With the exception of measles and scarlatina, which now destroy not more than half the average number of lives, the epidemics mentioned show a fatality that differs little from the usual amount. The gradual increase of mortality that has been observed since the second week of July up to the present date, is due to the diarrhœa, chiefly prevailing among children, which is known to attend this season of the year, and which, if the conclusion may be drawn from returns of corresponding weeks of 1840-9, has immensely increased since 1845, and, during later years, has produced a mortality sixfold the amount which was common in the earlier. Last week the deaths from diarrhœa were 136, of which 123 occurred amongst infants under three years; of these children not more than 17 had completed an existence in the world of 12 months. In the same week of 1846, there died 186 persons from diarrhœa; in that of 1847, the deaths were 111; in 1848, there were 141; and in 1849, 179. Last week 11 fatal cases of a more or less severe form of cholera were recorded; 6 occurred amongst young persons, and 5 at more advanced ages. The following are the circumstances in detail:—In Chelsea, north-west sub-district, at 5 Regent-street, on 30th July, the wife of a labourer, aged 47 years, died of "disease of heart (several

years), cholera 22 hours." In St. Margaret, Westminster, at 2 Windsor-place, on 26th July, a labourer, out-pensioner of Chelsea College, aged 70, "purging (3 days), spasmodic cholera (24 hours)." Mr. Needham remarks, that "deceased had lately been much overworked, was double ruptured, and frequently had relaxed bowels." In the same sub-district, at 26 Gloucester-terrace, Vauxhall-bridge-road, on 2nd August, the daughter of an engineer, aged 14 years, "cholera biliosa (24 hours), delirium (12 hours)." She was of a bilious habit, and had a severe attack two years ago. In Marylebone, at 15 Harrow-street, Lisson-grove, on 1st August, the son of a painter, aged 5 months, "diarrhœa (3 days), cholera infantum (10 hours)." In St. John, Marylebone, at 2 Samford-street, on 26th July, the widow of a labourer, aged 60 years, "English cholera (48 hours)." In St. Pancras, at 99 Mary-street, Hampstead-road, on 31st July, the daughter of a chocolate-maker, aged 7 months, "cholera infantum (7 days), phrenitis (2 days)." At 15 Tindall's-buildings, Gray's-inn-lane, on 31st July, the son of a labourer, aged 1 year, "cholera (3 days)." In Clerkenwell, at 15 Arlington-street, on 30th July, the daughter of a carpenter, aged 4 months, "English cholera (32 hours)." At 3 Pigeon-court, Houndsditch, on 30th July, the son of a clothes dealer (deceased) aged 1 year, "choleraic diarrhœa (20 hours)." Mr. Spencer states, that "this and other two houses, which are situated in a small, confined court, contain two rooms each, without ventilation at the back, and are confined by a high wall on either side. The mother of deceased was twice severely attacked with cholera last autumn." In West London, at 25, Ploughcourt, St. Andrews, on 28th July, a potmaker, aged 51 years, "bilious cholera (3 days)." In Southwark, London-road sub-district, at 10, Charles-street, on 2nd August, a printer, aged 56, "cholera (1 week) congestion of the brain." In a considerable proportion of cases in the above list, the terms of the medical certificates, the ages of the patients, or the duration of their sufferings, seem to indicate only the common form of the disease. Against the 11 deaths from cholera last week, it is necessary to state, that there were 12 in the corresponding week of 1844, 23 in that of 1846, 21 in that of 1848, and 926 in that of 1849.

MORTALITY TABLE.

Deaths in the week ending Saturday, Aug. 3, 1850.
(Metropolis.)

Causes of Death.	Aug. 3. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	485	288	144	917	10209
Specified Causes	485	288	144	917	10170
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	226	36	15	277	3491
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	3	23	14	40	458
Tubercular Diseases	71	94	9	174	1823
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	47	25	27	99	1151
Diseases of the Heart and Blood-vessels	1	23	14	38	244
Diseases of the Lungs, and of the other Organs of Respiration	30	24	16	70	753
Diseases of the Stomach, Liver, and other Organs of Digestion	22	29	10	61	764
Diseases of the Kidneys, &c.	...	5	5	10	87
Childbirth, Diseases of the Uterus, &c.	...	7	...	7	80
Rheumatism, Diseases of the Bones, Joints, &c.	2	8	1	11	57
Diseases of the Skin, Cellular Tissue, &c.	...	2	1	3	11
Malformations	3	...	...	3	19
Premature Birth and Debility	30	4	...	34	237
Atrophy	32	...	...	32	217
Age	...	...	30	30	459
Sudden	...	2	...	2	69
Violence, Privation, Cold, and Intemperance	18	6	2	26	250
Causes not Specified	...	...	...	...	39

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	Aug. 3, 1850.	Sum of Ten Weeks.
London...	1948369	917	10209
West	301189	119	1427
North	376568	190	1879
Central...	374199	166	1852
East	393067	194	2257
South	503346	248	2794

The following is the number of Deaths occurring from some of the more important special causes :—

Apoplexy ...	17	Heart ...	34	Phthisis...	122
Bronchitis ...	22	Hooping-cough ...	18	Pneumonia ...	28
Cholera ...	11	Hydrocephalus ...	30	Scarlatina ...	20
Childbirth ...	2	Influenza ...	...	Small-pox ...	13
Convulsions	36	Liver ...	13	Stomach ...	6
Diarrhœa ...	136	Lungs...	8	Teething ...	7
Dropsy ...	17	Measles ...	11	Typhus ...	32
Erysipelas ...	3	Paralysis ...	19	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males ...	772	462	310
Females ...	712	455	257
Total...	1484	917	567

METEOROLOGY OF THE WEEK.

Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...
Mean of Barometer.	29·403	29·713	30·054	29·968	30·028	29·945	29 903	29·859
Mean of Thermometer. Dry.	58·5	62·6	60·6	63·1	60·6	60·0	60·8	61·3
Ditto. Dew Point.	56·4	57·5	56·5	60·6	57·1	58·6	58·3	57·9
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	— 3·2	+ 0·9	— 1·0	+ 3·6	— 0·6	— 1·2	— 0·5	— 0·3
General Direction of Wind. A.M.	N.	N.N.W.	N.	Calm.	N.	E.	Calm.	N.
General Direction of Wind. P.M.	N.N.W.	N.	N.	Calm.	E.	Calm.	Calm.	
Amount of Horizontal Movement of the Air.	Miles. 100	60	45	10	20	60	60	SUM 355
Rain in Inches.	0·03	0·00	0·00	0·00	0·06	0·00	0·00	SUM 0·09
Electricity.*	No electricity was shown during the week							

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

Medical Evidence in Cases of Presumed Criminal Insanity.—Lord Campbell has, in a recent case, carried out the judicial decision made at Pate's trial, that medical men are not to express their opinion as to the sanity or insanity of a prisoner, which question is to be left for the jury to decide. In the case, Doe dem. Bainbrigge *v.* Bainbrigge, Lord Campbell being the judge, towards the close of the plaintiff's case, Dr. Monro, Dr. Conolly, and Dr. Forbes Winslow were put into the witness-box, to give evidence on the question of insanity, and were allowed to give general scientific evidence on the causes and symptoms of insanity, but not to express an opinion as to the result of the evidence they had heard with reference to the sanity or insanity of the testator, Lord Campbell saying, peremptorily, that he could not allow a physician to be substituted for the jury. The point, we believe, was reserved for the consideration of the judges; but we have no hesitation in saying, that it is a monstrous absurdity to allow a jury of unprofessional men to decide one of the most difficult questions in medicine, unaided by a medical opinion. "They manage these things better in France."

TO CORRESPONDENTS.

The receipt of books, pamphlets and newspapers, letters, and other communications, are acknowledged from Dr. Budd, Physician to the Bristol Infirmary, "Cases of Purpura, with Remarks on the Styptic properties of Oil of Turpentine;" Senex, on the "University Graduates' Committee;" Serjeant Wilkins, "Address in Defence of William Ross;" Dr. Merei, Paris; Mr. Ward, of Broad-street-buildings; Mr. Shaw, of Bishopsgate Without; Dr. Lodge, of Peckham; Mr. Habershon, M.B., of Finsbury-circus; A Bill for the Incorporation of General Practitioners in Medicine, Surgery, and Midwifery; Mr. Penney, M.P.; Mr. Spencer Wells, R.N.; Investigator; O. P. Q., of Halifax; Anti-quack, Halifax; A Yorkshire practitioner; Yorkshire; Mr. Thomas, of Liverpool; A Poor-law Medical Officer of Fourteen Years' Standing, and one who has been connected with four different Unions; Dr. Klein Grant; Dublin Quarterly Journal of Medical Science; Mr. Dobell, of Cottage-place; D. E.; New York Journal of Medicine; Mr. Keith, of Aberdeen; Mr. Fitzpatrick, near Liverpool; Mr. Knaggs, of Mountrath, Queen's County; Medical Relief; The Case of Mr. T. R. Tatham against the Huddersfield Board of Guardians. Two pamphlets. 1848 and 1850.—Messrs. Adam and Charles Black, Edinburgh, "The Principles of Surgery," by Professor James Miller, of Edinburgh. Second Edition, pp. 503. Edinburgh. 1850.—Mr. Lionel Beale, of Long-acre; Inquirer (too late for this week); Nepos; Dr. Barnes; Mr. William Henry Arthur (too late for this week); Dr. Coppinger, Queenstown, County Cork (too late for this Number).

A Friend in Edinburgh.—We noticed the paragraph to which our friendly Correspondent alludes, and we presume with him that it was penned by Professor Syme. We trust it was the means of enabling him to get rid of some peccant and bilious humours. Still it is a very ungrateful return for the salutary advice we lately gave him; and which, if followed, would conduce as much to his happiness as to his professional respectability. But, unfortunately, Mr. Syme, Paganini-like, plays upon a one-stringed fiddle, and all the tones he brings forth are mere modulations of that now hackneyed and very ludicrous cry, "I am the first Surgeon in Europe, and mine the first school in Surgery!" Mr. Syme can see no merit in those who do not think with him—nothing deserving praise in a journal that does not laud him. Like him of the song, who saw no no beauty in eyes that did not beam alone for him, he says—

"If she be not fair for me,
What care I how fair she be!"

and thus does he parody old Herrick's quaint and favourite ditty:—

Be your Journals good or fair,
Written with peculiar care;
If they do not praise up me,
What care I how fair they be?

Be their covers blue or brown,
Published here or there in town;
If they do not puff up me,
What care I how good they be?

Give me the Journal I desire,
To perch me up some inches higher;*
I shall then be well content,—
It will be most excellent.

A Correspondent has sent us the following:—

"Deafness and Noises in the Head.—Dr. Bennett, Consulting Surgeon to the Institution for Diseases of the Ear, 83, New-street, Birmingham, will visit Northampton every Saturday, and can be consulted from Half-past Eleven till Five, at the apartments of Mr. Emery, next door to the Union Bank, Drapery. Dr. Bennett *has discovered an infallible Remedy for the Cure of Deafness, which is daily practised at the above* Institution with perfect success in nine cases out of ten. Hundreds of applicants at the Dispensary, and also private patients, have been perfectly and permanently restored to their hearing, most of whose cases had, until this discovery, been pronounced incurable, being from thirty to forty years' standing. *Many instances of such cures on record*, where perfect hearing has been restored in ten minutes, enabling a conversation to be heard and carried on in the usual tone of voice."

*** We can only inform our Correspondent that the said Dr. B.'s name does not appear in the "Provincial Medical Directory;" and it is most probable that one who advertises his acoustic talent in a county paper for the benefit of the public, would also give to the world the list of all his diplomas, if he have any.

[To the Editor of the Medical Times.]

Sir,—Could you inform me if there is a school especially instituted for the education of the sons of medical men? And if so, where to apply for particulars. By so doing you will greatly oblige

A Subscriber.

*** In reply to our correspondent we regret to state that no such institution exists. Dr. Forbes, ever anxious to promote the real good of the Profession, attempted, some years ago, to found so desirable an establishment. He subscribed £100, and his bright example was immediately followed by Sir James Clark and Sir Benjamin Brodie, who put down their names for similar sums. Here, unfortunately, the matter ended, the Profession, in a most unaccountable manner, not responding to the proposal. How much better it would be if our contemporaries, instead of squabbling with us about trifles, concerning which the profession do not care one button, and wasting their wit upon personalities which only disgust their readers, would join with us, heart and hand, in endeavouring to carry out so very philanthropic a scheme as a "School for the Sons and Daughters of Medical Men." If any number of our professional brethren should express themselves as desirous of promoting such an object, we would gladly aid in its furtherance.

M. D., Edinburgh.—We beg to inform our correspondent that *we* are not of those who

"——— spare the prosperous, and most nobly wreak
Their vengeance only on the poor and weak."

Mr. Dobell, on Homœopathy, shall have early insertion.

Fair Play.—Yes. We are rapidly becoming pachydermatous.

Mr. Slasher's Lecture, very cleverly reported by Mr. Nockemorff, but not directed, as it should have been, to the Office in Princes-street, is not suitable for this journal.

A Looker-on—We published the names of our contributors in respectable journals. The editors of the Journal which now presumes to blame us made theirs known, probably in the hope of a "notice,"—(there is no accounting for tastes)—in the columns of "Chat," a penny Journal, found only on board the penny steam-boats, and in the shop windows of Holywell-street. While we continue to receive the countenance of such a list of contributors, we must persuade ourselves not to mind the petty jealousy of our various friends.

We shall be glad to hear from our friend at Sunderland as proposed.

D. E.—Slight hæmorrhage probably.

Dr. Barnes's Letter on the "Graduates' Committee," reached us too late for this week's Journal.

The Case of Gross Malpractice at Halifax.—We have received several communications from Halifax respecting this important case. We had already prepared for this week a more lengthened notice than that which appeared in our last Number, every word of which is verified by the information we have since received. But to enable us to avail ourselves of the many letters that have been addressed to us on the subject, we are obliged to defer the further consideration of it to our next Number. At the same time, we hope when we are favoured with important documents, affecting the medical reputation of members of our profession, that these reports and documents may be vouched for by the appending of the communicator's name, in full, rather than by the simple initials; and this not for publication, but as a testimony of good faith. "Investigator's" remarks being practical, have been kept in view.

Speculum Practice.—We are informed by a correspondent that certain enthusiastic speculum practitioners introduce their wives at their *séances*, which we scarcely can believe, for it is hardly possible that any man would expose his wife to such an exhibition. We should like to know who are the parties so accused; if such things are, the morality of the profession is indeed at a low ebb.

Mr. Keith, one of the surgeons to the Aberdeen Royal Infirmary, writes to express his firm conviction that we have been imposed upon with respect to the report that "death has occurred in one of the Scottish hospitals from the incautious use of chloroform;" and says, "Mr. M. should be required to name the Scottish hospital to which he alludes, that the staff thereof may vindicate their institution from a groundless aspersion." We shall be only too glad to find that the report is an error, but until it is formally contradicted, we must attach credit to the statement of our correspondent, who was a pupil at the Infirmary at the time the cases referred to occurred. The Infirmary in question is the Royal Infirmary of Glasgow.

Nepos.—For the purposes of emigration a Scotch diploma will serve as well as an English or an Irish one, but it will not enable its possessor legally to practise and dispense his own medicines in England, although many do so. It is probable that in a year or two some alteration in the law may take place, conferring on the Scotch practitioner equal privileges in that respect with the English. With respect to the obtaining the license of the English Hall of Apothecaries, or the Diploma of the College of Surgeons in Lincoln's-inn-fields, it is evident, from the statement "Nepos" makes, that he requires only the medical and surgical practice of an hospital, as additional certificates. The duration or extent of that practice depends on the date when he commenced attending lectures. As regards the Scotch diploma, unless "Nepos" be more explicit with respect to the certificates he already holds, and the name of the University or College to which he purposes applying for his diploma or degree, it will be impossible to reply, either as to what additional testimonials may be required or what expense of time and money may be incurred.

The Metropolitan Interment Bill.—The Royal assent was given to this bill on Monday last, the 5th inst.

Munificence.—The Court of Common Council of the city of London have just voted the munificent sum of 500*l.* to the City of London Hospital for Diseases of the Chest, and the sum of 100 guineas to the London Fever Hospital.

Ligature of External Iliac Artery.—This somewhat rare operation has just been successfully performed by Mr. Henry Smith. We shall lay the case before our readers in due course.

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* "Pigmies are Pigmies still, though perched on Alps,
And Pyramids are Pyramids in Vales."

ORIGINAL LECTURES.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

1. ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE IV.

The Tuberculous Predisposition Continued.—General Summary.—A Predisposing Cause of various Diseases.—Modifies the Symptoms, Progress, and Termination of Diseases.—Modifies the Effects of Remedies.—The subject concluded.—Tuberculosis, its Signs and Symptoms.—The Blood in Tuberculosis.—The Diagnostic Signs.—Anæmia.—Emaciation.—The Earliest Effects, Progress, and Results of the Emaciation of Tuberculosis.—Its importance in Diagnosis.—Necessity of determining the Weight and watching its progress.—Dr. Hutchinson's Experimental Researches.—His Table as a Standard of Comparison.

The two preceding lectures contain a detail of those structural and functional peculiarities of the constitution of man which have been handed down by the ancients, adopted by the moderns, and are confirmed by my own observation and experience as characteristic of the tuberculous habit. In the present section it is only necessary to append a

GENERAL SUMMARY OF THE STATE OF THE CONSTITUTION IN THE TUBERCULOUS PREDISPOSITION.

The facts contained in the preceding sections show, that, where the blood is of that peculiar character already described, and designated "tuberculous," there is a specialty in the development and form of different parts of the body, particularly of those which have cellular tissue for their basis. The whole of the peculiarities of structure and function are by no means present in every individual affected; sometimes a few only are to be observed, and there are none which may be said to be constant. In one case, the dilated pupil and smooth and almost transparent skin are the only outward signs of the predisposition; in another, the malnutrition and irregular development of the osseous system have proceeded so far, that the case borders on rickets, and there is but little deviation from the normal condition of the other parts; in another case, the tumid abdomen is observable, and there are signs which indicate a predisposition to disease in this region; in another, the malformation of the chest is the peculiar characteristic. In the present state of science, it is impossible to explain why a tumid upper lip in one instance, an elongated maxilla, or an enlarged and projecting os frontis, in others, are developed from tuberculous blood. Pathology is only on a par with physiology in this respect, since it is impossible to explain the innumerable variations of form and proportion among healthy indiduals; why the blastema derived from healthy blood developes great muscularity in one case, and obesity in another; or why one person has an aquiline and another a Roman nose. To comprehend the causes of these phenomena, presupposes, not only a knowledge of the composition and chemico-vital molecular actions and metamorphoses of the blood and blastema, but also of the laws of cell-growth and organisation, including those laws which determine the formation, elongation, splitting, transformation, the occurrence of secondary deposits, &c., of cells, in the construction of tissues and organs,—a knowledge far beyond that which we at present possess.

The specialty of the tubercular constitution has been described, at one time, as an "arrest;" at another, as a "retardation;" and again, as a "retrogradation" of development; but each of these terms is manifestly inadequate to define the nature of the peculiarities. It is true that, in the early infancy of individuals whose blood is tuberculous, the general frame is sometimes large, but, at the same time, thin,—that it wants the firmness of health,—and, as growth increases, it is found that the structures are late in attaining perfection, and the body is not well-proportioned,—there is a want of symmetry,—or it sometimes assumes a remarkably slender form,—imperfect formations, which have been referred to by several writers as illustrating the principle of an arrest of development. It is true, also, as urged by Dr. Addison,(a) that a retrogradation of structure in the mucous, serous, and fibrous tissues is exhibited in the tuberculous constitution—that fibrous recedes into mucous, or both into cellular tissue, and that the cell organisms themselves retrograde into their embryotic condition; but all the facts cannot be explained upon that principle alone. The abdomen being prominent, the head large, and the extremities small, certainly correspond with the state of the fœtus, in these respects, at the seventh month of uterine existence; but the multiform variations already described cannot be accounted for in a similar manner. There exist a depravation of nutrition, and an aberration of development, beyond a mere interruption to the ordinary physiological processes. The blood being tuberculous no doubt gives rise to an arrest of development; but it is not so much an arrest of development of organs and structures in their aggregate, as an aberration of nutrition in some, and frequently in several, of their component parts; and, although the tissues and organs may in all respects be regularly and fully developed, a tuberculous state of the blood produces malnutrition, without the absolute supervention of general or local disease, at any period subsequently; and it has been correctly pointed out, that this specialty of the organisation, consists of a modification in the *detail* of the structure of parts, as well as of the proper forms of tissues and organs.

This constitution manifests itself in every degree. In some individuals it is so decided from birth, that, sooner or later, and sometimes at a very early period of life, tuberculosis, as a necessarily fatal disease, occurs spontaneously. In others it is so slight that the continued action of those causes which are capable of producing a tuberculous condition of the blood is required to produce its pathological results. In those individuals in whom it is manifested in the slighter degree, the susceptibility of the whole system to rapid change from a healthy to a valetudinary appearance, and the converse, is sometimes very remarkable. When the blood is tuberculous, the florid complexion and the appearance of a full habit easily pass away under the influence of fatigue, privation, and disease; and when these causes cease to operate, and their opposites are in play, the blood recovers its normal constitution, and the health is rapidly restored. It is always a most suspicious circumstance when we witness a young person becoming cachectic in a particular locality, as in a large town, or under particular habits of life, exhibiting a pallid face, with the functions of life languid, recovering, (on removal to the country or the sea-side,) in a very short time, a florid hue with health and spirits, and then again rapidly declining—sometimes visibly relapsing in a week or ten days, on return to town. This indicates a want of stability in the composition of the blood. When such subjects reside in towns, and take little exercise, they frequently become plump and rounded, not from an increase of muscle, or a deposition of healthy fat, but from that low state of hypertrophy and super-infiltration of the cellular tissue, which has been already noticed, and is indicated by the roundness and plumpness very rapidly receding on the occasion of any slight indisposition, or unusual mental or bodily exertion.

The tuberculous condition of the fluids and solids, even in the degree indicated by the expression, "the tuberculous predisposition," becomes a real predisposing cause of numerous diseases. Of these, dyspepsia is amongst the most remarkable. Primary digestion is rarely (if ever) well performed; and dyspepsia is so constant an attendant, and presents such marked symptoms, that it has been called "strumous dyspepsia," and is considered, by Dr. Todd and others, as a more characteristic feature than any physiognomical portrait that has hitherto been drawn. It is said to be so constantly present, preceding and accompanying the symptoms of tuberculosis, in whatever variety or form it takes, as to rank as the cause of the disease. It will be hereafter seen, that the defective hæmatosis cannot be attributed to dyspepsia alone as a cause, but all experience confirms the facts; and there can be no surprise that the fluids essential to digestion in all its stages, being secreted from blood constituted as that of tuberculous subjects is, with the defective organisation which obtains of the mucous

(a) "On Healthy and Diseased Structure; or, the True Principles of Treatment for the Cure of Disease, especially Consumption and Scrofula," 1849.

and muscular coats of the alimentary canal, should render the digestion habitually feeble, and that dyspepsia should prove an important link in that chain of morbid actions which too frequently leads to the fatal result of tubereulosis.

Among the affections to which tubereulous subjects are predisposed, the symptoms and history of which are influenced and more or less obviously explained by the peculiar state of the blood and the structural and functional modifications of the system constituting the tuberculous habit, may be enumerated:—Cold indolent abscesses in the loose cellular structure, especially of the limbs, their particular symptoms and history depending upon the imperfect organisation of the cellular basis and the tubereulous qualities of the blood; catarrhal affections, attributable to the special malnutrition of the mucous membranes, and to their proneness to mucous discharges, their irritability, and their tendency to congestion; as in affections of the nasal passages, which are liable to be long-continued and attended with copious discharges; also exemplified in the tendeney to leueorrhœa in females and to hæmorrhoids in either sex; diarrhœa, with large alvine discharges, resulting from slight causes of irritation; hæmorrhages, as epistaxis and effusions of blood from the trachea, bronchiæ, urethra, and alimentary canal, arising, either with or without rupture, from the tenuity of the vessels and the diminished vitality and plasticity of the blood; chronic glandular affections, invading the cervical, axillary, inguinal, or mesenteric glands, the lymphatic glands having a great tendeney to enlarge from slight irritations of the mueous membranes or the skin; chronic affections of the thyroid gland; chronic inflammatory affeetions of the eyes, eyelids, and ears; frequently occurring hordeolæ, &c.; chronic congestions of the lining membrane of the internal fauces, with enlargement of the tonsils; various eruptive affeetions of the skin and hairy scalp, many of them attributable to the peculiar organisation of the skin in tubereulous subjects, and the dyserasy or poverty of the blood; among these have been enumerated varieties of porrigo, psoriasis, pityriasis, herpes, lichen and purpura in children,—ichthyosis, pityriasis, porrigo, erythema, and one form of lupus at a later age,—and at a still later period, acne indurata, which becomes one of the most characteristic signs of this habit of body—(Dr. Todd); inflammation of the serous membranes, with specific symptoms,—hence, inflammation of the synovial membranes of the joints, the tubereulous meningitis, as described by Dr. Hennis Green (a), the tuberculous perieardítis, as described by Dr. George Burrows (b), and the tuberculous peritonitis, as described by Sir H. Marsh(c), either of which may occur in the predisposed without the deposition of tubercle, as well as in tubereulosis in consequence of the deposition of tubercle; chronic osteitis, caries, and necrosis, resulting from the peculiar organisation of bone; chilblains, attributable to the languor of the circulation of the extremities, the state of the capillaries, and the specific qualities of the congested blood; finally,—in illustration of the real predispositions established by a tubereulous state of the blood,—where the morbid irritation has invaded the nervous substance or its cellular envelopes, the nervous structures become liable to chronic congestions, inflammations, and effusions; and hydrocephalus, epilepsy, insanity, and other neuroses may be classed in the category of the affections to which tuberculous subjects are predisposed.

In a tubereulous state of the blood, the constitution is prone to feverish attacks from irregularities of diet, exposure to cold and moisture, and from other very slight causes. A general ulcerous diathesis also prevails, absorption very constantly predominating over the other nutritive processes, owing to the diminished vital power or momentum of vital force in the various tissues, and the poverty of the blood, which renders it more apt to receive than to part with the elements of nutrition. This ulcerous diathesis is frequently exemplified by ulcerations of the cornea and of the articular cartilages. There is a tendency to excessive and unhealthy or spurious suppuration, which tendency is in relation to the vitiated quality of the liquor sanguinis; and the low vitality of the solids and fluids generally, is favourable to the development of intestinal worms and other parasites.

Tuberculosis, as a blood disease, has not only a train of local and general affeetions to which it constitutes a powerful predisposition, many of which affections are in a great measure peculiar to itself, but it has a remarkable influence in modifying the symptoms, progress, and termination of most of the diseases to which the human frame is liable, and the effects of most of the remedies employed for the relief of those diseases. Inflammation in a healthy state of the blood differs very materially from inflammation in a tubereulous state of the blood, and its characters are still further modified where the structures have been nourished and sustained by tubereulous blood. It has a chronic and asthenic tendency, easily understood when we consider the low vitality of the blood, the diminished heat-producing power, the small proportion of corpuseles, and the vitiated liquor sanguinis. In healthy inflammation, cytoblasts, or the germs of cells form or make their appearance very rapidly in the blastema or exudation. In the exudation of tubereulous blood they do not appear so quickly. The exudation is not so genuine a *liquor puris;* that is to say, the cytoblasts, if formed, or exuded, are not so readily formed into pus globules. The fluid effused during inflammation, when the blood is tuberculous, has, again, far less tendeney to form new fibre. Whatever may be the mode in which fibre is produced, there can be little doubt that the vitiated blastema poured out by the degraded liquor sanguinis accounts for the fact; and this consequence of the morbid state of the blood frequently renders the products of inflammation inorganisable where they ought to be organisable. So, also, by considering the qualities of the blood in the tuberculous predisposition, it is easy to understand, that it is one thing to extract blood, even in diseases requiring depletion, from an individual in whose blood, in his ordinary state of health, the usual proportions of fibrine and red corpuscles exist, and another to perform the same operation where the blood is deficient in red corpuseles and fibrine, and vitiated in its albuminous principle. The modifications of the action of remedies are also exhibited very frequently in the application of blisters, leeches, setons, and even venesection, the injuries from which are sometimes slow to heal, or liable to unhealthy suppuration, or followed by eruptions of pustules in the surrounding skin. The bleeding from leech-bites is apt to be excessive, and with difficulty restrained. Membranous inflammation is prone to run into purulent discharge, as from the ears, nose, eyes, and vagina. Ophthalmia, in whatever structure it be seated, differs greatly in tubereulous subjects from ophthalmia in healthy subjects. Again, fractures are slow to unite. A wound, or a stump after amputation, affords a modified secretion when the blood of the subject is tuberculous; stumps have been described as secreting distinct curdy matter at the second dressing. Fevers, particularly those of the eruptive order, fluxes, lues venerea, in fact, all diseases, are more or less influenced in their symptoms, progress, and termination; and frequently, when in their essential nature mild and salutary, become obstinate and fatal owing to the peculiar condition of the blood and tissues in the tuberculous constitution.

Thus, the tuberculous predisposition acts as a predisposing cause of a long catalogue of affections, and very essentially modifies almost all other diseases. In this point of view its importance could not be overrated. But tuberculosis is an idiopathic disease, *sui generis*, and no principle in medicine is better established than that the different varieties of this, the most fatal of all diseases that afflict mankind, present themselves most frequently in individuals of the constitution here described. As remarked by Andral, both in the old and the young, the development of tubercle in various organs, and in several organs at once, most frequently occurs in those who present the characteristics of the predisposition; and the development of tubercles is most abundant and most general where, from this constitution being most distinctly marked, we have reason to regard the blood as in the highest degree tuberculous. It is this direct tendency to favour the development of tuberculosis and the deposition of tubercle that we have especially to investigate as we proceed.

From all that has preceded, the tuberculous predisposition is not a mere aptitude to be more easily affected by the causes of tuberculosis. Short of actual disease, it is an abnormal state of the constitution, both in its solid and fluid constituents, and in its vital power, of the same nature as tuberculosis. Where the predisposition ends, and where tuberculosis as a disease begins, is most difficult to be defined. Here, as in many other instances, nature operates by transitions—there is frequently

(a) Medico-Chirurgical Transactions. Vol. XXV. p. 192.
(b) Medico-Chirurgical Transactions, 1847, p. 77.
(c) The *Dublin Journal of Medical Science*, March, 1843.

no clear line of demarcation. Nor does the predisposition necessarily pass into disease. Many have been deemed consumptive throughout life from having exhibited this constitution in a well-marked form, and have nevertheless attained longevity, and died from some other malady. It by no means follows from this circumstance, that their blood was never tuberculous, and that they were never subjects of the predisposition; but it shows that, under favourable circumstances, the predisposition may never pass into actual disease, and that the blood has either been in a tuberculous state in a slight degree only, or, if more intensely affected during the period of growth and development, that it has recovered the standard of health at a later period of life. Even the conformation of the osseous skeleton, as of the bones of the chest, for instance, will improve, if the constitution of the blood be improved,—a circumstance which has been occasionally observed to happen without obvious cause. Again, it is most important to state, that tuberculosis may attack not only individuals of this particular habit, but even the robust, with a complete physical development, well-formed chest, and great muscular power. Individuals of a decidedly sanguine temperament occasionally die of phthisis. Examples of this are, however, rare; they occur most frequently in middle life, and they indicate the spontaneous generation of the disease in the individual rather than the hereditary transmission. In these cases the causes of tuberculosis have operated at a later period of life, when the tissues and organs were completely formed, and when no more than the ordinary slow progressive waste and nutrition were in play; the result being the deterioration of blood and the rapid formation of general tuberculosis with a quick deposition of tubercle in one or more organs, but without those changes of structure which in great part constitute the predisposition, and which take place most especially during development and growth.

[To be continued.]

ORIGINAL COMMUNICATIONS.

CASE OF PURPURA,
WITH REMARKS ON THE STYPTIC PROPERTIES OF OIL OF TURPENTINE,

BEING THE SUBSTANCE OF A CLINICAL LECTURE.

By Dr. WILLIAM BUDD,
Physician to the Bristol Infirmary.

I am anxious to call attention to the case of M. A. Riley, who was lately an inmate of Ward No. 2, and is still on the books as an out-patient. Her history may be briefly told. She is a poor widow, aged 65, of spare habit and broken health, and already much wrinkled and very infirm. Since the death of her husband, which happened twenty-one months ago, she has suffered much from want, being often without sufficient food for days together. For the last eight or nine years she has been greatly plagued with asthma and winter cough; infirmities which have lately much grown upon her. Since the beginning of last winter the cough has been permanent, and, being attended with profuse expectoration, has added much to her weakness. The complaint which brought her under my own care is, however, of another nature, and of quite recent origin.

Five days before admission she discovered, on getting out of bed, that her body and limbs had become thickly sprinkled with dark purple spots; she also observed that her urine was bloody, and in the course of the same day she began to bleed profusely from the mouth. Her stools were like soot. She had, in fact, become the subject of *purpura hæmorrhagica*. It would appear from her account, that these phenomena came on quite suddenly,—a fact not new to the history of the disease, but probably of some importance as to its pathology.

On the following day she grew rapidly worse. Blood flowed from the mouth without ceasing, and much was also voided in the stools and urine. On the 17th of May she reached the hospital very faint and exhausted, having come on foot from her own house, about two gun-shots off. Within an hour after her admission I was summoned to her, as she appeared to be fast sinking. I found her in a state of alarming collapse. Her body and limbs were thickly covered with the characteristic ecchymoses, whose peculiar purple colour first gave the name to the disease. These ecchymoses were especially numerous and thickly set along the shins of both legs and the corresponding aspect of both forearms; on the thighs and upper arms they were more widely scattered, and on the trunk more widely still. In their general arrangement they were strictly symmetrical. As further illustrative of this, it may be mentioned, that there was an ecchymosis in the outer corner of each eye, and one at each angle of the mouth. The centre of those at the corners of the mouth was occupied by a small slough in process of separation. In the interior of the mouth, at a spot corresponding to the centre of the right cheek, there was a similar slough, nearly an inch long, and about half an inch broad. Blood was oozing very freely from under the detached border of all these sloughs. On the outside of the cheek was a large bruise mark, corresponding to the seat of the slough within. Numerous large blotches or bruise marks of the same kind were plentifully scattered over the surface generally. In addition to these, the following particulars were noted in the course of the day: gums firm and of natural colour; stools sooty and like coffee-grounds; urine the colour of blood, highly albuminous, and throwing down, on being allowed to stand, a layer of grumous blood, occupying about one-sixth of the whole depth of the fluid.

Face pallid, without yellowness, and, with the exception of the large blotch already mentioned, free from ecchymoses.

Tongue and interior of mouth much blanched.

Debility extreme; faintness on every change of posture; tongue tremulous; pulse 100, small and weak; no febrile movement; appetite tolerably good; thirst natural; no enlargement of liver or spleen; extremities cold.

Cough frequent; expectoration copious; sputa opaque, greenish, diffluent; physical signs of a high degree of emphysema, with catarrhal râles.

I ordered her to be put on a generous and varied diet, including meat and vegetables, milk, and eight ounces of wine.

In the shape of medicine, she was to take two scruples of chlorate of potash daily, and ten grains of extract of krameria, in a wine-glassful of the decoction of logwood, every four hours. My colleague, Mr. Morgan, directed the bleeding sloughs to be "mopped" frequently with a dossil of lint soaked in oil of turpentine.

The effect of this last measure was immediate. The bleeding ceased from the moment of the first application of the turpentine, and did not afterwards return; the sloughs soon came away, and in a few days, under the continuance of the same treatment, the sores were healed.

On the other hand, there was not the slightest check put to the other symptoms. The urine continued to be as much charged with blood as ever; the evacuations as black and sooty; and fresh ecchymoses made their appearance in great number from day to day. Wherever any, even the slightest, pressure was made, a large bruise-mark was sure to be seen shortly after. The bodily weakness increased rapidly, and it soon became plain that, unless means could be taken to stay the loss of blood, the poor woman could not survive many days longer.

Matters being at this pass, on the 21st, after four days' trial, the chlorate of potash and astringents were given up as of no avail, and in lieu thereof twenty minims of oil of turpentine, in emulsion, were ordered to be taken every six hours. An immediate amendment followed the change of plan. Before four doses of turpentine had been given all hæmorrhage had ceased. On the following day the urine was pale and transparent, free from albumen, and every other trace of blood; blood ceased to appear in the evacuations from the bowels, and no new ecchymosis occurred on the surface of the body.

On the 28th, seven days after beginning the use of turpentine, the blood extravasated into the conjunctivæ had nearly disappeared, and the spots over the body generally had much faded.

Meanwhile, the patient had gained greatly both in flesh and strength. Her recovery suffered no interruption, and on the 21st of June she left the hospital much improved in health and condition. The turpentine was continued for a fortnight only. On the 4th of June, there being no trace of purpura remaining, it was given up, as of no further need. On the 25th of May, the evening dose was vomited. One drop of creosote was, in consequence, added to each dose of the emulsion, and no sickness occurred afterwards. On the

28th there was some strangury, but this ceased at once on a slight reduction of the quantity of turpentine taken.

I shall not detain the reader from what he must already see to be the chief point of interest in the case just related, by any lengthened comments on the subject of purpura generally. Materials for the true pathology of this disease are as yet wanting, and it is not pretended that this case furnishes any addition to them. On this matter I will content myself, therefore, with a single remark. Purpura is no doubt correctly described as being, in the main, a disease of the blood. But, although the blood may be principally in fault, I think it is going too far to assume, as many do, that the altered state of this fluid is the *direct* and sole cause of its remarkable tendency to escape from the vessels. That it is in part the cause of this tendency, there is no reason to doubt; but that it is wholly so, is not proved. Although nothing of the kind has as yet been shown by direct observation, it seems to me more than probable that weakness of the vessels themselves, from defective nutrition of their walls, has a still larger share in the result. The symmetrical distribution of the ecchymoses is a fact which is, on the whole, strongly in favour of this view. Did time permit I could mention others, which seem scarcely to admit of any other conclusion.

Equally foreign to our present purpose would it be to enter at length into the question as to whether there be any relationship—pathological or other—between purpura and scurvy. To show that these two diseases are essentially distinct requires no laboured proof. It is enough to appeal to the striking contrast between them touching the circumstances under which they are known to arise. It has long been finally established that the one and sole cause of genuine scurvy is prolonged abstinence from fresh vegetables. Persons even moderately supplied with fresh vegetables, or their expressed juices, never get scurvy. Persons ever so abundantly supplied with them may get purpura in its worst forms. The three most rapidly fatal cases of purpura I have ever seen, occurred in persons who for months before had lived chiefly on potatoes and greens.

In scurvy, fresh vegetables and their juices are a speedy and infallible cure; in the treatment of purpura there is no proof that they have any efficacy beyond that which they possess as necessary constituents of a complete and wholesome diet.

These differences are fundamental, and it is clear that the two diseases to which they belong must be distinct in their very essence. Both may be characterised, more or less accurately, as diseases of the blood; and, in both, there is a peculiar tendency in this fluid to escape from its vessels; but here all similarity ends.

These considerations are, however, wide of our present mark. The interest of the case of M. A. Riley, is, I need scarcely say, wholly practical, and lies in its value as a striking illustration of the styptic properties of the oil of turpentine. It would, of course, be highly unphilosophical to found any conclusions as to the efficacy of a remedy from the observation of its effects in a single case. The result which here followed so closely upon the administration of turpentine has, however, been observed before in other cases without number. In purpura, especially, its virtues have long been known. The late Dr. Whitlock Nicholl believed it to be quite a specific for this disease in its idiopathic form, and, to judge from the case before us, he was not so far wrong. I may add, that since this case occurred, I have met with three others, in which hæmorrhage of various kinds and from various sources ceased at once, on the administration of turpentine, after other medicines had failed. The first of these was also a case of purpura; the second, a case of hæmorrhage from the nose and kidneys; the third, one of hæmoptysis, from tuberculous disease of the lung. In the last, the outpouring of blood was truly appalling. The patient had already coughed up more than two quarts (by measure) before the first dose of turpentine was given; and yet, in spite of this tremendous loss, the bleeding was still going on without check or abatement.

It is right to add, that the power of this agent to staunch blood is no new discovery. The merit of it belongs, it would appear, to a provincial surgeon,—a Mr. James Yonge, an eminent practitioner, who lived at Plymouth in the time of Charles the Second. Mr. Yonge first made his observations public in the year 1679, in a pamphlet, bearing the quaint title of "Currns Triumphalis è Terebintho," or an "Account of the many admirable Virtues of the Oil of Turpentine."

His own account of the origin of this pamphlet is curious enough, and will bear quoting. Mr. Yonge, having already obtained a great name in his own town, was invited to London by a Mr. Sparke, who was at that time the member for Plymouth. While in London he became intimate with James Pearse, then Surgeon-General to the Navy, and also surgeon to the Duke of York, and it was an incident that grew out of this intimacy, that led to the publication of the "Currus Triumphalis."

"Being one day," writes Mr. Yonge, "invited by Mr. Pearse to a cyder-house with Dr. Short, Mr. Tyson, Mr. Hobbs, and another surgeon, (designed by Mr. Pearse to try me;) we talked warmly of many things. At last, talking of the restrictive liquor of Mr. Denis, now called the royal styptic, we discoursed of other things to stop hæmorrhage. I quietly allowed each to give his opinion, when I demanded if they knew of a thing that could incomparably stop hæmorrhage of a wound, and that without manifest stypticity, sharpness, &c., but was one of the highest balsams, and should restrain the bleeding and digest together; secondly, if they could cure amputated stumps by consolidation. They confessed their ignorance, and laughed at the second as impossible; but I so explained and discovered myself, that they were extremely satisfied, and Mr. Pearse gave me great thanks, and asked me to write more on it. So I wrote my 'Currus Triumphalis è Terebintho,' which passed the approbation of the whole of Gresham College."

Apart from its relation to the present subject—this little peep into a dim, old, bygone century—with our author and Mr. Pearse at a cyder-house "to meet Dr. Short, Mr. Tyson, Mr. Hobbs, and another surgeon *(designed by Mr. Pearse to try me)*," is not without its interest.

I think it right to say, that I am indebted for these particulars to a very interesting Memoir of James Yonge, which, together with a translation of the pamphlet on turpentine, you will find in the January Number of the *Edinburgh Medical and Surgical Journal* for the present year.

The next testimony I shall quote, is that of the illustrious John Hunter. Speaking of styptics generally, Hunter says: "A dossil of lint, dipped in oil of turpentine, after having first wiped the wound clean, in order that it may reach the vessel, is the best, and may be renewed pretty often. I have seen it immediately stop vomiting of blood from the stomach, after all other means had failed, given internally with white of egg, as often as the stomach would bear it. In external hæmorrhages, where it had not the desired effect applied externally, I would give it internally. *It is the best if not the only true styptic.* Thus, in a case of nasal hæmorrhage, which nothing would stop, I gave ten drops of oil of turpentine in a draught, and repeated it every two or three hours, which entirely stopped the bleeding in less than twenty-four hours, and it never returned."

These, are very remarkable words. They are the words, too, of a man of genius; of a man who was particularly cautious of committing himself to any rash statement; and they refer to a matter on which it is obviously easier to collect evidence free from ambiguity than on almost any other connected with the practice of our art.

The testimony of Mr. Vincent, late senior surgeon to St. Bartholomew's is to the same effect, and equally strong. After making some observations on the subject of the hæmorrhagic diathesis, this experienced surgeon goes on to say—

"A most desirable object would be obtained by securing some remedy that would alter this peculiar disposition in vessels to bleed, and arrest the loss of blood; so that it may not continue to endanger the life of the patient. I have so invariably found turpentine infallible in effecting this intention, that it may, I think, be depended upon as a most valuable remedy.

"Some years ago a youth was brought to me who was passing blood in his urine. I ordered some draughts, with a few drops of oil of turpentine; the bleeding quite stopped before the end of the second day, and did not return. About a twelvemonth afterwards he was brought to me, having cut his finger but slightly; it had continued bleeding for some days. I gave him turpentine again; it stopped in a day or two. Not long after he came a third time to me; he had a tooth extracted, and it had been bleeding for several days. The turpentine was had recourse to, and the remedy soon acted in the same sanitary way. I have several times been

called in on account of hæmorrhages where teeth have been extracted, and have never seen the turpentine fail in this nor in other similar cases of hæmorrhage."

The reader will not fail to remark, that the evidence which has now been laid before him, not only tends to show that oil of turpentine is possessed of styptic powers of a high order, but that, if this evidence be good, these powers are effectual in issues of blood from sources the most various, and arising from causes the most diverse. Tubercnlous hæmoptysis, nose-bleeding, hæmatemesis, purpura, and traumatic hæmorrhage, have little else in common, beyond the fact of an unnatural escape of blood from its vessels. The effects of turpentine in purpura, therefore, are most probably directed, not against purpura as purpura, but against purpura as hæmorrhage. Bearing this in mind, I beg it to be also borne in mind, that in the case of M. A. Riley, not only did the bleeding from the kidney cease immediately after its administration, but that from the intestine also, as well as the tendency to extravasation from the vessels of the skin.

Another very important fact, that would also seem to be established by this evidence, is, that turpentine is even more effectual in arresting hæmorrhage, when directly applied to the bleeding surface than when it is given internally. From these facts taken together, the inference would seem to be pretty secure, that its virtues as a styptic must depend on its exerting some direct influence on the contractile power of the blood-vessels. In the elementary nature of such a property we seem to find the best, and indeed the only, plausible explanation of the equal efficacy of this medicine in restraining bleeding under such a great variety of pathological conditions. In the adoption of this view, we also obtain, if I mistake not, the best guide to the cases in which its administration is most likely to be successful. They are, on the one hand, the great group of hæmorrhages, which are generally characterized by pathologists by the epithet *passive;* and, on the other, those in which, in addition to its general action, the remedy comes into direct contact with the surface from which the blood is issuing. I have had no experience of its effects in hæmatemesis arising from simple ulcer of the *stomach*, but, from what we witnessed in the case of our patient's *mouth*, I can readily believe that Dr. Seymour is right in the conclusion to which he has come, that in that disease it not only tends to stop the bleeding, but also promotes the healing of the sore.

In what are called active hæmorrhages, it would not seem to be so suitable a medicine. We must not, however, be hampered by definitions like these in cases where life is threatened. Cases of hæmorrhage are cases in which, beyond all others, the nice distinctions of pathology have to give way before the great emergencies of practice.

In the treatment of uterine hæmorrhage, whether occurring in connexion with parturition or not, the employment of turpentine, both topical and internal, admits, I have no doubt, of much more extensive application than it receives at present. Of its great use in severe menorrhagia from common causes I can speak from my own experience; and in the *Provincial Medical and Surgical Journal* for the present week, Mr. Griffiths, of Wrexham, gives a series of cases, from which it would appear that, in the dose of half an ounce or an ounce, repeated once or twice, according to circumstances, this medicine often succeeds in arresting at once the flooding which is apt to occur after delivery, and which is sometimes so appalling.

In common cases, such as those of purpura, for instance, where time does not press, I have found doses varying from ten minims to half a drachm quite effectual; but in cases of rapid loss of blood, where, as sometimes happens, every minute is of importance to life, it is better to give half an ounce or an ounce at once, to be followed up by smaller doses at shorter intervals.

I should mislead you, were I not to add, before concluding, that the use of this medicine is not without its drawbacks. Few great gifts come to us without alloy, and turpentine is no exception to the rule. In the first place, there are few drugs more repugnant to delicate stomachs. In many, it excites vomiting; in others, it causes painful strangury; and the irritation of the urinary organs is sometimes so great, that blood is passed with the urine.

Some of these evils may, however, be avoided, or much diminished, by adopting a particular mode of administering the medicine. Thus, I have found that the addition of half a drop or a drop of creosote to each dose almost entirely covers its nauseous taste, and prevents the risk of sickness. Creosote itself is not, it must be owned, the most palatable of drugs, but neither is it nauseating. Ten or twenty drops of spirit of rosemary will help to make the prescription less disagreeable; and of the different vehicles proposed for keeping the turpentine in suspension, I think you will find common mucilage the best.

The inconvenience arising from the risk of strangury is not so easily obviated. Something, however, may be done to diminish it, by causing the patient to take freely of diluents pending the employment of the medicine. After all, it is well to know that this accident is not a serious one. However severe the irritation may be, it speedily subsides on suspending the treatment, and, as far as I know, it never leaves any permanently bad effects, even when it has gone on to bloody urine.

I have entered thus at length into this subject for two reasons: first, because of its great practical importance; and secondly, because I believe the styptic powers of turpentine are not so well known and appreciated as they deserve to be.

To possess a medicine on which something like reliance can be placed for the suppression of internal hæmorrhage, is one of the things most to be desired in the practice of an art whose first object is to save life.

There is nothing so appalling, both to the sufferer and the by-stander, as the sight of blood issuing largely from parts within the body, and beyond the reach of the surgeon's hand,—as there is nothing that would seem, at first sight, to be more beyond the physician's power.

There is sufficient evidence already on record to lead to the presumption, at least, that in the styptic properties of turpentine such a power is to be found, in a far higher degree than in any other styptic in common use.

That these properties are not generally known, I infer from the fact, that, in Professor Christison's Dispensatory, which is one of the most recent, as well as one of the most complete works on the virtues of drugs, there is no mention even of them. As, however, these properties admit of being readily tested, the subject is one on which every one may judge for himself.

REMARKABLE CALCAREOUS TUMOUR OF THE CRANIUM IN AN INFANT.

By R. F. BATTYE, Esq.,
Pimlico.

On May 31st I called to see a patient, who was nursing a neighbour's infant. It was playful, and appeared in excellent health. All I observed in it different to many infants was, that the head was not quite symmetrical; but I made no remark, supposing it to have resulted from its being chiefly suckled from one breast. In this conjecture I was wrong.

At the time I saw the child it was twelve and a half months old. Its parents are healthy and reside at No. 9, Ponsonby-place, Vauxhall-bridge-road.

On June 1st, the mother called upon me with the little patient, stated that, on the evening previously, she had, for the first time, observed a swelling on the left side of the head, soft, but pressing it gave no pain.

It was situated immediately below the parietal eminences, and extended from thence to the base of the mastoid process inferiorly, and, posteriorly, to within about an inch of the occipital protuberance; and, anteriorly, to about the centre of the squamous portion of the temporal bone. It was bounded by a narrow band of apparently organised lymph, marking its extent. When examined by touch, it was found to be distinctly fluctuating; and if, by the character of the fluctuation, the *degree* of fluidity can be at all determined, I should have supposed the state of the fluid to have been extremely limpid. Upon pressing its centre very gradually, the fluid distended the walls by which it was enclosed on every side, (I cannot say *sac*, as subsequent detail will show its impropriety). Upon reaching its base, the posterior inferior angle of the parietal bone could be distinctly felt, and the junction of its posterior margin with the occipital; its inferior with the temporal, as well also as the junction of the posterior superior margin of the temporal bone with the adjoining margin of the occipital, opposite to the inferior parietal angle, could be felt, and each was found to be in-

completely ossified; a space of about three-eighths of an inch intervening between each of the approximating margins, leaving an opening somewhat of the shape of an inverted funnel.

The child suffered very little pain during the investigation. I concluded that the tumour arose from some affection of the membranes of the brain, of a chronic nature, being analogous to spina bifida, *alias* a kind of external hydrocephalus.

In such an unusual case it was difficult to decide upon treatment. At first I determined to apply gentle compression, but as the situation and nature of the tumour presented many difficulties to carrying out this successfully, I preferred quietly considering the matter over before acting.

On June 4th, to my great surprise, the distension of the tumour had *greatly* increased, its boundary-line remaining the same; and, though fluctuation could be distinctly felt, yet it was not as distinct as it was when I first examined it: but I supposed the increased distension of its walls in a great measure accounted for it. During the whole of this period the child was well, but could not lie on its left side.

June 5th.—I acupunctured the tumour in several places over its superior third, hoping by so doing to *gradually* empty its contents: first, by repeating it often, and secondly, by acupuncturing the tumour a little lower each time I repeated the operation. Such often are the measured steps theory teaches us to adopt, before trial has proved their inutility.

Contrary to what I anticipated, not one drop of fluid escaped from the punctured points, and their margins were but just covered with blood. I passed the needle about a quarter of an inch deep, in five different places. I found each of the punctured places presenting an irregular resisting medium as the needle entered, which, from the peculiar impression felt, I considered to result from the tumour being intersected by numerous fibres interlacing each other. I thought also that I could feel one or two gritty objects; but the grittiness felt appeared diffused, and more abundant at some points than others; since I only felt it with any degree of distinctness at two of the punctured points.

This examination, of course, led me to take quite a different view to that first entertained, which I communicated to the mother, and stated that, should the case terminate favourably, it would be by the tumour being converted into a bony mass; the only ill effects of which would be that the little babe's comeliness might be a little damaged.

As the child continued well I gave it no medicine of any kind, nor made any external application till the 7th., when it was rather more restless during the night, and the tumour emitted a slight degree more heat than usual, for hitherto it had been of a normal temperature with the rest of the scalp. The bowels were regular, the pulse good, being neither quick, hard, nor unduly compressible; I therefore applied a weak solution of nitrate of silver over the surface, hoping thereby to destroy atmospheric influence in connexion with its surface. Beyond this single application no treatment was employed, the case being left to nature's care. At this time the probable termination of the tumour was apparent; for at its superior portion two white and hard points of about half an inch in diameter presented themselves, one anteriorly, the other posteriorly.

On the 9th the whole tumour was converted into one solid calcareous mass. My anxiety thus terminated, with the satisfaction of being preserved from unnecessarily, and therefore, often injuriously, interfering with nature's work.

After the whole process had arrived at completion the child appeared weak and languid, though not feverish, or defective in appetite, and with a little ferri ammon. tart., and minute doses of tartar emetic, it was soon as lively as ever.

As far as I am aware, this case is unique. Since the throwing out, or forming of a provisional callus to supply a *natural defect*, till nature has repaired the defect by granulations arising from the separated edges of true bony structure, (as that of the parietal angle and adjoining bones in the present case,) has not as yet, so far as I know, been described; but it is quite possible for such a case to have been recorded, and for me to be entirely ignorant of it. Suffice it to say, that this case is very different to nodes, or cases arising from injury. Mr. Earle's case, as given in "Cooper's Surgical Dictionary," article "Spina Bifida," cannot, I think, with propriety, be considered as analogous. And, if I shall not be trespassing too much upon your valuable time, I will here make a few remarks upon what I suppose to be its cause.

It may be, that these remarks, in substance, are in some respects original; but, whether they are so or not it is unimportant: the case requires their being adverted to. I shall, therefore, briefly allude to such matters as may appear to stand as causes to the case in hand.

During the time of teething, especially at its commencement, morbid changes often occur in the brain, or rather in its membranes; and thence to its substance, if the first be long continued. So much for pathology, but what may be said of pathology, cannot be said with equal propriety of physiology.

The period an infant begins to walk, attempts to stand alone, and to move its arms about freely and definitely, is that period in which the brain appears to undergo the greatest changes in a short period; especially the cerebellum. This may be proved as follows.

If the occipital protuberance opposite to the base of the occiput be examined, a remarkable hollow will almost invariably be found, *previous* to the infant's individual or active efforts to move have commenced; but examine an infant two or three months after it has commenced walking, &c., and you will almost invariably find the cerebellum, or that portion of the cranium corresponding to where it is situated, enlarged, and rather full; most decidedly very different to the period of passive infantile motion. At the age of three to four, it appears to have attained its maximum, with relation to the rest of the brain; and I account for it upon the supposition, that the cerebellum is the seat of *volitionary consensual motions*. Dr. Carpenter, I believe, in one of his works, has expressed something approaching thereto, but has not directly affirmed it. (a)

It will be found that almost all pugilists, either trained or intuitively such, (I used the word *intuitively* in a limited, and not unlimited, sense here,) have large cerebellums. The instance of whole horses and geldings have been quoted to support opposite opinions with regard to sexual tendency; but I believe that the horse which is the safest under foot, and the best runner and trotter, will, whether gelding or whole, have the largest cerebellum. And why the pugilist is so rapid and precise in his motions is, most probably, nay, certainly, owing to the beautiful and rapid adjustment which one class of muscles effects upon the relaxation of an antagonistic class, whether it be in the varied positions taken in the muscles pertaining to one limb, or in the aggregate motions of the different classes of muscles called into action by opposing limbs: for I do not think it right to view the consent of action in two limbs towards a given point or end, as necessarily distinct from the reciprocating and responding consent made in the various classes of muscles in one limb, to perfect or effect a given end; but, contrariwise, the ability to stand upon one limb, without motion of the trunk, or to preserve motion for any distances, or length of time, in one limb, without the most perfect consent of the various classes of muscles to re-adjust themselves in the most rapid manner, when either class are exhausted, could not exist. And, to this end, a most delicate and powerful adjusting medium is required, which shall check overplus of action, on the one hand, and supply deficiency on the other, in a much more rapid manner than we might at first sight suppose to be necessary. But this adjusting function is not certainly excito-motory, since it is under the *direct influence of the will*.

All then I have to say upon this point is, that before the mind of the infant begins to be systematically cultivated, and whilst, by the external circumstances under which it is placed, it is learning the nature and use of physical and mechanical power, and is getting this lesson well implanted into the mind; it is at the same time calling into vigorous action a class of organs, the muscles, which before were comparatively quiescent; whilst, moreover, at this period, it is for the first time directing the will towards their motions in a definite manner, and, with these changes, the cerebellum is enlarging.

(a) Since I wrote this case, and the subjoined remarks, I have seen Dr. Carpenter's Manual of Physiology, published in 1846, where I find these views more definitely set forth than I had imagined they were. My impressions of the Doctor's views of the cerebellum were gathered from the first edition of his work upon General and Comparative Physiology. I am sorry I cannot refer to it at this time; still more so, should I here say anything that might appear like plagiarism. His be the honour!

Perhaps you will ask me, Do I think the cerebellum the sole organ employed in regulating voluntary muscular action? To this I must reply by stating, that I do not take this view of the matter. The function of the cerebellum I believe to be this, that it affords a medium through which the will acts with greater ease and definiteness upon the nerves of voluntary motion; and I so conclude chiefly on this account, because, where large, the will appears to have the power of directing action, without having previously to go through so long a process of reasoning as those in whom it is small, before the judgment is decided. Hence, those in whom it is large, being generally better able to attain their ends speedily, by exercising mechanical violence and feats with greater ease and success than others not so conformed, are generally more the slaves to low and degrading passions than others; not through difference in will or desire, but in ability or courage to secure the objects of their will and desire. Since many, otherwise conformed, often gain the same ends, but generally, to my simple notions of honour, in a more venal and degrading manner.

Furthermore, if I mistake not, it gives the individual in whom it is large the power of directing his whole energies upon any object more completely and rapidly, as compared with others not so constituted; so that he has generally gone through all the reasonings called forth upon any particular subject in a much shorter period than another otherwise constituted. Hence the flighty, hurried, and impatient character of many thus constituted, in intellectual matters, until checked by long experience.

From these remarks you will perceive, that I do not conceive the cerebellum to strictly constitute any portion of the thinking apparatus; but I conceived it to be something like what I suppose to be *one* of the functions of the spleen, namely, an organ which does not secrete bile; but, by the abstraction of elements, by its numerous lymphatics, and other alterations to which the blood is subjected whilst passing through it, the liver is enabled to secrete from its venous blood the elements of bile *more readily;* and so to *economize time* during the process of chylification, which, for its completion, requires no small quantity of bile. So likewise the cerebellum does not classify or re-arrange the sensations transmitted by the nerves of sensation going through it to the cerebrum; but, from long and careful observation in those in whom it is large, as well as from the agile and exquisite tact of the shark, but especially the porpoise, (for information concerning which I am indebted to an intelligent and observing captain of a merchantman.) I should conclude that such sensory nerves as pass through the cerebellum, while taking such course, the sensations transmitted through them have everything abstracted or removed from them, which in anywise interferes with the correct transmission of the primitive impression as first received; for it is possible to suppose that a sensory trunk may, and can, have its primitive and natural sensation (or that received at its periphery) checked and interrupted by many adventitious circumstances during its course to the cerebrum. And what I think is, that the cerebellum performs the important function of suffering only the original peripheral or natural sensations to be received; and that it is an organ capable of detecting and checking the slighest deviation from its primitive state.

Thus it abridges the necessity for long abstraction and reasoning on the one hand, and renders more certain the instructive or reflex action of the cerebrum on the other hand, and so greatly facilitates the executive and volitionary functions of the cerebrum.

I am lengthened upon this matter, but how to abridge in a matter like the present I know not; but what these remarks can have to do with my little patient you may wonder; yet, Sir, I think we shall be able to apply to it.

1st. Then, at my patient's time of life the *will had just begun* to act definitely upon the muscular system; and, co-existent with that, the cerebellum enlarges, and the bones enveloping the brain generally become firmer and harder; and, if such be the case, it follows, that calcareous matter is more abundantly supplied to the organised gelatinous structure of which the bones of infants chiefly consist; and, as a consequence thereof, the periosteal structure, which supplies a network of capillaries to the bone, must itself be much more vascular at this period than any other in the healthy state; and, as a result of this, no doubt the great number of eruptive affections of the scalp, from six or eight months to four or five years of age, are to be ascribed.

From these considerations I conclude that, if any sufficient source of irritation can be supplied direct to the periosteum, without its having to come into contact with the osseous surface, at this period (infantile period) of life, whereby the irritation is probably checked, and deflected towards the surface, (this being more sensitive and susceptible to injury than osseous structure,) it is probable, in such case, that the scalp would suffer chiefly; whilst, if the osseous structure be absent, that the periosteum would take upon itself an inflammatory action, there being no structure enabling it to deflect the irritation; and such I believe to have been the case in my little patient.

The anterior fontanelle appears to be a remarkable exception to such a view; but perhaps not conclusive.

EXTRACTS

FROM THE

DIARY OF A DISPENSARY PHYSICIAN.

No. II.

[Continued from page 61.]

"Rely not alone upon silent and dumb remembrances."

SIR THOMAS BROWNE, M.D.

"A memory which treasures up what has already been found injurious is the best of preservatives," is a statement to be found in the "Akesios" of Professor Marx. If I have been anxious to point out the value to be derived from the duties of a dispensary, I am not the less so to indicate certain drawbacks against which it is imperatively necessary to be upon one's guard. Everything has its opposite in nature; and the more intense the one, the more prominent the other—the greater the good, the more marked the evil. So with respect to our present subject; the more productive of many advantages a dispensary is found to be, in a ratio with the extension of its field for practice, the more likely is it to engender certain errors it is my duty to allude to. We are all human, all alike subject to the same vicious elements of our intellectual and moral nature, though, from certain influences, some are rendered less amenable than are others to their power. Yet, school ourselves as we will, and be improved as we may, these elements will exert an action, however variable or subordinate in degree it may appear. As Dr. Arnold says, "we are often wrong in our instincts, only being otherwise by an effort of our reason or principle, as one overcomes all one's bad propensities." (Letter cxx.) When the duties of a dispensary are heavy, and its patients numerous, the young physician must be cautious not to allow, after a time, a feeling of monotony to creep unwarily over him. At first, the novelty, the new field of investigation he has entered upon, the freshness of all he sees, and the knowledge of how much he has to learn, prevent, to a great extent, this feeling from arising, and he is not apt to slur over his duties from sheer want of attention and of adequate and patient inquiry. If anything is undone, it is rather because he knows not that it must be done, or how to do it, than that he knows it, and yet neglects it. But afterwards this may not be the case. Conscious that he has seen much and learned much, he reposes much, and imagines himself too safe in his acquired knowledge. This he converts into a reason—satisfactory to himself—for very often too quickly disposing of the sick attendants in his waiting-room. His bell daily rings more quickly and quickly, until at last, and when he believes his time becomes more precious to him, one might imagine he knew and treated human suffering after some principles of intuition, rather than after the deductions of a cautious and legitimate inquiry. Patients throng upon him; his experience has enabled him to seize rapidly the broader and more characteristic outlines of manifest disease, and unless some very important or unusual malady comes before him, the minuter shades and more delicate tones of the picture are not inquired into, the general thing is assumed, the prescription written, and a patient dismissed, who really may be suffering under a disorder not dreamed of, or though, in its general terms, rightly divined, yet is accompanied by particular circumstances absolutely necessary to be known if the patient and the art of medicine are to receive justice. "The

race of life has become intense, the runners are treading on each other's heels. Woe be to him that stays to tie his shoestrings;" so says, at least, Thomas Carlyle. But we cannot listen, for one moment, to the application of his aphorism to medicine. We must stop—or our untied latchets will hereafter make us stumble—otherwise, not only should we be inflicting great injustice on our art and on our patient, not only refusing a new and further experience, but absolutely educating ourselves in a false one, the more imperious and permanent in its results from the very circumstances under which it has it orgin. If, then, this feeling of monotony, of indisposition to increasing work, backed by a too great trust on the more prominent markings of what may be termed a discursive medicine, be not carefully guarded against, depend upon it it will occasion the very worst of habits, and a serious diminution to the increased experience we might otherwise attain. Must I support my assertion by examples? Suppose, then, that we have just dismissed a patient evidently suffering under phthisis; the one who next enters is pale and thin, and states he has gradually become very weak, that he has had a cough a long time, with—so far as we can understand—purulent expectoration; the bowels are irritable, and, in fact, he presents much the same broad manifestations of disease as the patient before him. We are satisfied, and consider him phthisical. An examination with the stethoscope might prove him to be affected alone with bronchitis: or, *vice versâ*, we may mistake bronchitis for phthisis. Another patient follows, complaining he has caught a severe cold, has great pain in the loins, and believes it to be rheumatic, as he formerly had rheumatism. He is treated for it—for lumbago, but neither colchicum nor the iodide of potassium, &c., does him good,—he gets worse, and we discover that he has disease of the kidneys. An examination of the urine at first might have previously settled the matter. A woman enters, blanched, complaining of debility, œdema of the feet and ankles towards night, and of irritable heart. Chlorosis is allotted to her, but neither iron, quinine, nor digitalis does her good. Weeks after, we discover she is the victim of severe abdominal organic disease. Another, according to her own statement, is "too long or too much unwell." After a few questions we are satisfied, and the case is regarded as one of simple menorrhagia. But in spite of everything, a constant recurrence of the discharge ensues. A digital examination then makes known the existence of an uterine tumour, or some organic disorder, and our menorrhagia is found to be secondary uterine hæmorrhage. In children the complications of bronchitis and pneumonia with hooping-cough may be thus readily passed over at their commencement, and the head symptoms in remittent fever sometimes easily confounded with tubercuIous meningitis, or *vice versâ*. The neglect of rectifying the statements of a patient by our own proper investigation may lead to strange errors. Thus it occurred to the writer, from his own negligence, to be on the point of transferring a patient to the surgeon, as labouring under hernia, and requiring a truss for the same, when an examination at a future day discovered the disease was great engorgement and swelling of the uterus, with partial prolapsus. A patient had been seen once or twice by the surgeon, and then transferred to the physician. He exhibited certain peculiar symptoms indicative of disturbance of the nervous centres. On examination of the prescriptions by the physician, it was seen that the patient had been treated by stimulants and tonics, and the former was given to understand that the surgeon regarded the complaint as one dependent upon masturbation. The physician, giving himself little trouble about the matter at his first visit, depended upon the surgeon, and continued a similar treatment. At his next visit, however, the symptoms had become so anomalous as to cause him to inquire minutely into the case, when he came to the decision that important lesional disturbance of the nervous centres was going on in all probability of the character of low scrofulous inflammation of the membranes of the brain, or upper part of the spinal cord. The treatment was entirely altered. The patient relapsed and re-relapsed, and finally died. On a *post-mortem* examination, purulent matter was found effused between the arachnoid and dura mater over the right hemisphere of the brain, the latter membrane being perforated in one spot, permitting of the escape of pus between it and the calvarium. We are correct, we believe, in saying, that the surgeon was not a little astonished when he heard of the nature and termination of his case of masturbation,—a vice, I may remark, that the patient, when questioned by the physician as to his addiction to it, firmly and entirely denied the practice of. A few months after the above occurred, the same physician was requested by another to visit a patient with him, assumed to be labouring under an obstinate form of intermittent fever. The physician being more influenced by his colleague's opinion than by the results of careful inquiry (which was neglected to be made,) agreed in the diagnosis and a continuance of the treatment. The next day, the surgeon before alluded to was sent for to draw off the patient's urine, and who was thought to be dying. An enormously distended bladder was discovered—ready to bursting—with an invetcrate and old stricture, the cause of the evil. This the patient had kept secret, until at length the bladder not relieving itself even by dribbling, the agony had become so great, that secresy could be preserved no longer. The surgeon read the writer of these extracts a lecture on the liability of mistaking such cases for intermittent fever, without instituting proper inquiry. Again, a little boy of between seven and eight years of age had been visited by the house-surgeon of a particular institution, the patient being considered to have remittent fever. The physician was soon requested to see him, as it was feared peritonitic inflammation was setting up. He did so, and, forewarned by the previous case at the dispensary, made every inquiry. A highly distended bladder was found, accompanied with great pain over its region, and an œdematous state of the penis. The physician immediately dispatched the surgeon for some catheters. On the latter attempting to draw off the urine, it was found impossible to pass the instrument down the urethra, it meeting apparently with some hard obstruction. The prepuce was punctured so as to diminish the œdema, and a stone extracted from the urethra. The remittent fever and peritonitic symptoms soon left the patient.

Organic diseases of the stomach, and some structural affections of the upper bowels, are very liable to be mistaken for mere functional disorders, at first, under insufficient investigation; and we have known the strongest influences employed, to endeavour to obtain the consent of a patient with scrofulous disease of the knee-joint, to submit to amputation, no care being taken to satisfy the mind that the lungs were not affected. The patient being well known to a physician to have a large cavity in one of them. We believe, that over and over again, have "pains in the bowels," and "forcing," with irregular action of the intestines, been treated as functional disturbances alone, when the existence of hæmorrhoids, abscess, or fistula was little thought of as being the cause of all the inconveniences complained of by the patient.

Whatever may be the experience gained by clinical observation, or how great soever the powers of diagnosis the physician flatters himself he has attained, yet he will find that nothing can excuse the fullest investigation of all cases that come before him. Without it he will fall nineteen times into error, and once he *may* make a happy guess. Unfortunately, this, once made, may itself do mischief in increasing still further the tendency to this mere guessing, for such a precise medicine must inevitably consider it. One morning, after having sat three hours seeing patients at a public institution for a special class of diseases, nearly the last patient was a young girl of between thirteen and fourteen years of age, brought to the physician for his opinion under particular circumstances. She had, some time before, been apprenticed from the institution at Norwood, to a mistress, to learn waistcoat-making. Her parents had died from phthisis; she was thin, pale, and greatly debilitated; had severe cough, with expectoration, and could do no work. Her mistress believed she was consumptive, but as she had been so well-behaved an apprentice, did not wish, without strong reasons, to part with her; moreover, she wished to know, if it was proper she should sleep with her daughter. Time was becoming precious to the physician; another institution was awaiting him; if he stopped longer he would be too late. Examine the patient properly, he could not he believed; and moreover, he thought he was right in assuming she might not be phthisical, but was labouring under typhoid remittent—if Dr. Jenner will excuse it—with its complication bronchitis. An epidemic of the kind was about, and this patient appeared to exhibit many of its characteristic symptoms. Accordingly, ammonia in bark, with ipecacuanha and hyoscyamus was prescribed, with counter-irritation to the chest. The mistress was

requested to bring the girl back the next day of attendance, with the promise given her that the pulmonary organs should be carefully examined. But until the physician saw his patient again he was on thorns as to the issue, when the diagnosis should be rightly established. Happily for him, in one sense, the next day he saw her she was described as better in every respect. A proper examination was instituted, and she was declared to be non-phthisical; the respiratory organs appeared sound in every respect. It seemed to the physician that his diagnosis had been correct. During the prevalence of the same epidemic, a little boy was brought to the physician with much the same symptoms as the girl just mentioned, and under what he considered the same pressure of time against proper examination. The same guessing, for I can call it nothing else, was adopted, and the more readily, it is feared, from a sort of unconscious influence the result of the previous case exercised. The next day of attendance a request was made that the boy might be visited at home, as he was much worse. At the visit it was discovered the patient had phthisis.

I have said that such slurring over one's duties is more likely to occur with respect to those patients who attend at the dispensary than with those who are visited at home; but it is feared that no small amount of self-condemnation would find its origin under the latter circumstances. The commencing complications of pneumonia with measles, the more progressed one of pleuritis, even to empyema in scarlatina, and the secondary involvment of the heart in cases of pneumonia, have often, it is suspected, been neglectfully overlooked until art could do little for their avail.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

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FATTY TUMOURS.

FATTY tumours usually form in those situations where the adipose substance is normally present, namely, about the shoulder, loins, buttock, &c. We do not expect to find them about the scalp, eyelids, or organs of generation, where accumulations of fat, a common occurence in middle age, would lead to serious inconvenience. Mr. Lawrence, however, removed, a few years ago, from the scrotum, a large adipose tumour, measuring eight inches in length by six in width, which had existed three years, having been first noticed as a lump of moderate size in the middle of the scrotum, on the left side. The gentleman from whom it was removed, about 40 years of age, and of spare make, was a person accustomed to considerable bodily exercise, and had passed much of his time in the warm climates of the south of Europe.

On Saturday, July 27, 1850, Mr. Lawrence removed from the forehead of a woman, aged 40, a small fatty tumour, about an inch in length and half an inch in width, situated between the integument and the left half of the frontal attachment of the occipito-frontalis muscle. The tumour was firmer than the usual kinds of fatty tumour; the lobules were small, and separated by tolerably firm fibrous septa; it was loosely attached to surrounding parts. Tumours in this situation are usually encysted, and contain atheromatous or steatomatous matter and hair; but sometimes they are fibrous or cartilaginous, and intimately connected with the tendon of the subjacent muscle. Mr. Lawrence observed, that he had once removed from the occipital region of a lady, a fatty tumour the size of a small apple, which had caused inconvenience by projecting into the long back hair. It differed from the present one in adhering very closely to the scalp, and in requiring some dissection for its complete separation. The pressure of any part of the dress will soon cause adhesion of the integument to these subcutaneous tumours. The only proper mode of getting rid of them is by extirpation with the knife. An incision through the skin generally exposes a mass of extremely soft and, at times, semi-fluid yellow fat, which not uncommonly lies in a cellular cyst, from which it readily comes away. We cannot recommend an attempt at removal by "the passage of a seton through them, so *that they may waste away in suppuration!*" It is stated, that this method is more tedious and painful than excision; but it may be adopted when it is an object to avoid a long cicatrix,—on the face for example. There are few people who would be willing to wear a seton in some prominent part of the face in the hope that, after a few years, I presume, a mass of fat there situated would waste away in suppuration. Patients would get very tired of carrying about, upon a part of the person, always exposed, some water dressing, or poultice, or some such application, to receive the purulent secretion from the track of the seton. But, independent of the great annoyance which such a practice would cause to the patient, it may be doubted whether it would be even efficacious in the way represented. Fatty tissue is slow to inflame; a seton might remain imbedded in such a structure for an indefinite time without doing either good or harm. The best result would be, that it should excite acute inflammation, terminating in an abscess; but then there would follow the inconvenience of a much more unsightly cicatrix than that made by the knife.

ABSCESS.

There are few subjects more deserving the attention of the surgeon than the formation of abscesses, their varieties, complications, and treatment; we meet with them presenting themselves under all conditions, either painless or acutely tender, soft and fluctuating, or hard as bone, in nearly every tissue and region of the body. The matter secreted by the cyst-wall is sometimes thick as cream, at others thin and serous, and mixed with flakes of lymph, with tuberculous matter, or with blood. Pus usually possesses a faint odour, but when partially decomposed it becomes extremely fetid; instances, however, are very common, in which well-formed healthy-looking matter, contained in an abscess formed in the neighbourhood of the intestinal canal, proves, when first evacuated, fetid in the extreme, without any direct communication with the viscera, the secretion losing its offensive odour after a few days free discharge, when the part heals, as does an abscess formed in other situations. On August 7, 1847, a middle aged woman was admitted into the hospital, under Mr. Lawrence, with an extremely painful abscess of five days' duration, situated just above the pubes. She stated that she was subject to irregular action of the bowels, and complained of pain caused by some "hard knots" along the course of the intestine. A free incision gave discharge to some extremely fetid pus; the colour and consistence being both natural; microscopic examination could not detect any peculiarity in the constitution of the fluid. The day following, the discharge had lost the fetid odour, and the wound healed without an unfavourable symptom.

In the month of September, 1846, Mr. Lawrence was consulted by a gentleman, who came to London from a large provincial town, in a state of great anxiety respecting a large and hard tumour in the right iliac fossa, apparently attached either to the posterior part of the pelvis, or to the deep parts contained within. Although the anterior boundaries were well defined, it was impossible to insert the hand under it, or towards its posterior part; there were absolutely no symptoms attending it which would warrant any inference as to its nature. Mr. Lawrence met Dr. Latham in consultation upon the case; and it was their joint opinion that, as nothing in the way of treatment was advisable at the present moment, the patient should, for change of air, go to the sea-side. In the course of a few weeks he returned, looking more pallid, haggard, and anxious. The integuments over the tumour had then become red and painful, and there was evident deep-seated fluctuation. His journey to town, although by the railway, had given him much pain. After a few days rest and poulticing, Mr. Lawrence opened the tumour with a double-edged knife; and there flowed forth first a dark reddish brown-coloured fluid; then from below, and quite deep, some thick yellowish creamy

pus of most offensive odour. A sharp attack of purging came on, which yielded readily to the usual treatment; nothing unnatural came from the bowel. In the course of a few days the purulent secretion had ceased to be fetid, and the gentleman returned to his home, the wound, of course, being not yet closed. In the course of the same year Mr. Lawrence saw a little boy, who was suffering from a large abscess, which had separated the integuments of the abdomen from the subjacent parts into a loose fluctuating swelling, extending nearly half round the abdomen. Upon an opening being made, some extremely offensive pus flowed out, and the boy recovered.

These abscesses require to be opened freely as soon as ever fluctuation can be clearly detected. There should be no hesitation on the part of the surgeon; a scalpel should be steadily passed through the walls of the cyst, and the opening enlarged to a proper extent; neither probe nor fingers should be introduced into the wound, but the matter should be allowed to flow out with the gradual contraction of the cyst. Above all things a gum elastic catheter (the recommendation of some surgeons) should be kept out of the wound; such practice is both barbaric and dangerous.

The danger of procrastination in opening these iliac abscesses was illustrated in an unfortunate case, in which the parents of a child, aged 15, neglected obtaining proper advice in the early stages of the disease, and sent the boy to the hospital in the summer of 1846, when it was obvious that his chance of recovery, under any circumstances, was extremely small. There was a large fluctuating abscess in the upper part of the right thigh, pointing over the femoral vessels, and extending into the iliac region: the boy was thin and pallid, and suffered from night perspirations. An opening was immediately made by Mr. Stanley; there escaped a considerable quantity of fetid pus, upon the top of which there soon separated a clear, thick, and oily fluid, like synovia. In the course of a few days severe pain came on in the knee; the suppuration became very profuse, and the boy died about two months after his admission.

Examination of the Body.—There was a large abscess in the right iliac fossa; the matter which had infiltrated the iliacus internus muscle, had made its way through the bony acetabulum into the hip-joint; the articular surface of the femur, though still retaining patches of cartilage, was deeply ulcerated, but the bone itself was of its normal consistence. There was an opening in the anterior part of the fibrous capsule, leading to the abscess, which became prominent in the front of the thigh. There can be no doubt, as the intestinal canal was healthy, that, had this patient been seen in the early stages of the disease, the free evacuation of the matter would have led to his complete recovery. A young woman, aged 26, is at the present time under Mr. Stanley's care, having been admitted with a large, painful, abdominal tumour, situated under the parietes, and chiefly to the right side. She referred the swelling to some transactions which had taken place for the first time about two months previous, since which she had not been well. With the enlargement of the swelling the pain became considerable, and she suffered extremely from violent attacks of vomiting, which exhausted her strength and prevented her taking food. The history not being such as would lead to any inference as to the nature of the tumour, several careful examinations were made, and it was the opinion that, through the abdominal parietes deep-seated fluctuation could be felt. A trochar having been introduced, there flowed forth a quantity of well-formed, thick, but fetid pus, which seemed to come from a considerable depth. With the evacuation of the matter, her general symptoms improved, and she is now going on favourably. Mr. Stanley referred to a case which he had seen some years ago, in which a patient, labouring under a similar disease, but not in any acute pain, became suddenly very ill; she experienced a sensation as if something had given way; the pulse sank, she passed into a state of collapse, and died. Upon examining the body, it was found that a large ovarian cyst had inflamed and suppurated, and that it had burst into the cavity of the abdomen.

The practical inference to be drawn from the cases here related is, that iliac and other abscesses, connected with, or in the proximity of the abdominal viscera, should be opened as soon as ever the surgeon can be sure that he feels fluctuation. If left to burst, no one can tell which course they will take, or what may be the amount of mischief done to surrounding parts.

H. C.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,
Assistant-Surgeon to the Hospital and Demonstrator of Anatomy in the School.

SEVERE INJURIES FROM THE EXPLOSION OF GAS.

Three patients were admitted under the care of Mr. Adams, at about two o'clock on the morning of July 8th, having been blown up four hours previously by the explosion of gas at the Ilford Toll-gate.

The first case was that of the wife of the gate-keeper, aged 32, who had sustained a *compound comminuted fracture of the foot*, the different bones being broken into very small fragments. The external wound commenced at the back of the inner malleolus, extended downwards and outwards into the sole of the foot, and was about two inches broad; it was filled up by lacerated muscular and cellular tissues, and the torn vessels and nerves going from the leg into the foot. The fibula was fractured at its lower third, and appeared also to be fractured and dislocated at its upper connexion with the tibia. As there could be no doubt about the propriety of amputation, the patient was placed on the table for the purpose of having the limb removed above the knee. A sudden fainting fit prevented this being done. Gangrene of the foot commenced about twelve hours after the accident, and rapidly involved the leg; the knee joint became swollen and tender, and the lower part of the thigh much inflamed, and the patient died suddenly on the afternoon of the third day after the accident, never having sufficiently rallied, notwithstanding the free administration of wine, &c., to allow of the performance of an operation.

On a *post-mortem* examination, the muscles and fascia at the back of the leg were found extensively contused, a large quantity of blood being effused between their fasciculi, and in the surrounding cellular membrane. The head of the fibula had been dislocated from the tibia, and the shaft of the bone immediately below was fractured in two or three pieces. The knee-joint was distended with a sero-purulent fluid, and a small piece of cartilage from the outer condyle of the femur had been detached,—from what cause, however, it did not appear. There was no evidence of internal lesion.

The second case was that of the gate-keeper himself, aged 32, who had sustained *a simple fracture of the left thigh, and a compound fracture of the os calcis of the same side.* On careful examination, the os calcis was diagnosed as being broken into two or three portions. There was a small external wound a little behind the inner malleolus, and which, though irregular in outline, could be covered by the tip of the little finger. There was no other lesion of the integument of the foot. The posterior tibial artery had not been injured. Warm-water dressing was applied, the leg and foot placed in a common side-splint, and four splints were applied to the thigh. The limb was laid on the outer side, the leg being slightly flexed. The patient died in the evening of the fifth day after the accident, having never thoroughly rallied from the great prostration of power in which he was when admitted. He complained much, during the period from his admission to the time of his death, of constant pain in the lumbar region. On inspection, the os calcis was found detached from the cuboid bone, and fractured into eight or nine pieces, and covered over with dark-coloured blood. The calcaneo-astragaloid ligament had not been ruptured, a portion of the broken calcis remaining in connexion with it. The thoracic and abdominal organs were healthy.

The third case was one of *compound fracture of the upper fourth of the right leg, with simple fracture of both bones of the left leg a little above the ankle-joint.* It occurred to a man named Sellars, between 40 and 50 years old, a man of temperate habits, well built, and muscular. He is superintendent workman of the gas-works adjoining the toll-gate, and had been sent for there prior to the explosion. He has been in the hospital twenty-two days, and is now going on favourably.

A careful inquiry into the cause of this accident has led to a knowledge of the following particulars:—The small house in which the explosion took place is an octagonal building, measuring 13 feet 3 inches in diameter. It was divided across the centre by a partition-wall of brick and plaster, extending from the roof to the foundation. Underneath the flooring of the house is a space, bounded in the

front and at the sides by the pentagonal walls, and behind by the partition-wall. This space is about a foot deep, and had a capacity of about 80 cubic feet. Here it was that the gas-pipe in connexion with the main was situated; and the light over the door not burning to the satisfaction of the gate-keeper, he opened a trap-door in the floor, and a syphon was unscrewed from the supply-pipe, believing that water had collected in it, and had interfered with the steadiness of the light. The opening thus made had an area of $\frac{3}{8}$ths of an inch, through which the gas escaped at a rate of 40 cubic feet per hour. The pipe was kept open for 15 minutes, during which time about 10 cubic feet of gas must have escaped into the compartment beneath the flooring, and it must have mixed very rapidly with the atmospheric air of the place; for, when the man Sellars stooped down to see what was the matter, a light having been given to him, the whole of the mixed gas took fire, and exploded with great violence, breaking up the flooring, blowing out the window, and knocking down a considerable portion of the front and partition walls of the building, and materially injuring the roof.

It is difficult to form an estimate of the total explosive force exerted by the gas on this occasion; but I am led to think, from some experiments conducted by Dr. Letheby, that it was probably equal to about 20 tons; for he informs me that a column of mixed gas, consisting of 1 part coal-gas, and 7 atmospheric air (the proportion acting in this case), expands, when fired, about five times in bulk, and exerts a pressure of about 4 lbs. on the square inch. In the report given by Dr. Arnott, in the month of October, 1848, on the explosion which took place in Albany-street, it is stated, that the strongest explosive mixture consists of 1 part gas, and 10 atmospheric air, the expansion being in that case tenfold; and, in a report furnished by Monsieur Tourdes, on the explosion which took place at Strasbourg in that year, it is stated, that the greatest force results from a mixture of 1 gas and 11 air. These discrepancies doubtless arise from the circumstance, that the gas furnished by different companies contains very variable proportions of its main constituents. I am informed, for example, that the best varieties of coal gas consist of about 27 hydrogen, 53 light carburetted hydrogen, 7 olefiant gas, 8 carbonic oxide, and 5 nitrogen. The gas examined by Tourdes consisted of 31 hydrogen, 22·5 little carburetted hydrogen, 6 olefiant gas, 21 carbonic oxide, and 14 nitrogen; while the London gas, which is a very inferior article, consists generally of about 35 hydrogen, 49 light carburetted hydrogen, 2 olefiant gas, 10 carbonic oxide, and 4 nitrogen. Now, the first of these would require about $7\frac{1}{2}$ times its bulk of air to fire it completely, the second about $4\frac{1}{2}$, and the third about $6\frac{1}{4}$.

The force of the explosion would also vary with the relative amounts of carburetted-hydrogen and olefiant gas, both of which yield large proportions of gaseous products. The researches of Sir H. Davy into the explosive nature of light carburetted-hydrogen show, that while seven or eight parts of air to one of gas produce the greatest effect, a slight difference in the proportion of either of these constituents modifies the results very materially, for a mixture of 1 part of fire-damp and 1 of air, burns, but does not explode; 2 of air, or 3 of air, to 1 of gas, produces similar results; 4 of air and 1 of gas exposed to a lighted candle inflames without noise; 6 of air to 1 of gas produces a slight whistling only, and 8 of air to 1 of gas a louder sound. He found also that 1 part of gas to 10, 11, 12, 13, and 14 of air also inflamed, but the violence of the combustion was much diminished, and when 15 of air were used there was no explosion at all; from which it may be inferred, that the dangers arising from the escape of coal gas may be greatly kept under by using a large supply of atmospheric air, that is by ventilating the rooms thoroughly in which the escape is going on. The smell of gas is perceptible, according to Mr. Taylor, when it is mixed with 500 times its volume of air; and it is very evident when it forms the 1-150th part of the mixture, so that we can recognise the presence of coal gas by its odour long before enough of it has escaped to render the atmosphere of an apartment dangerous. Now, the damage done in this instance may be advantageously compared with that which resulted from the explosion in Albany-street. In that case it appears that the capacity of the room in which the explosion took place was about 1620 cubic feet, and the gas had been escaping from a crack in the meter for one hour and twenty minutes, the room being closed during the whole time. On entering it with a light, the proprietor and a shopwoman were blown, together with a part of the wall of the house, into the back yard. They were much burned though not killed. A maid-servant, who was in the passage near the front door, was dashed across the street, and killed by being impaled on the railings, and the house was wholly demolished, the buildings right and left also being much injured.

KING'S COLLEGE HOSPITAL.

BY

HENRY SMITH, Esq., F.R.C.S.,
(Formerly House Surgeon to the Hospital.)
AND
ROBERT C. R. JORDAN, Esq.,
House Physician.

CASE OF CHRONIC DYSPEPSIA, WITH VOMITING OF THE SARCINA VENTRICULI.

The following case is chiefly interesting on account of the patient vomiting the minute parasitic fungi first described by Mr. Goodsir, and named by him sarcinæ ventriculi; the term sarcina being derived from their resemblance to miniature woolpacks. They consist of cubic masses divided into square spaces by lines intersecting each other. The accompanying sketch will, however, give a better idea of the microscopic appearance of these curious parasites than can be given by any description. The other bodies scattered over the field are oil globules derived from the food of the patient.

Henry Lyon, aged 41, was admitted into King's College Hospital on the 12th of July, under the care of Dr. Todd. It seems that even in very early life his powers of digestion were not strong; since, as a boy, there were some articles of food which he dared not eat, and he was very liable to hiccough after any slight indiscretion in diet.

He was afterwards brought up as an architect and surveyor; from his own statement he has always led an active life, until the last two years, since which he has been obliged to give up work owing to the state of his health.

When young he lived for some time in the north of England, and became partial to oatmeal, which he continued to eat as an occasional article of diet, until about six months ago. He has also been a very inveterate smoker, but has lately tried to leave this off.

From the age of twenty to thirty-three years he lived rather freely, and during that period had five or six attacks of gout. The last of these happened when he was thirty-two years old; after this he had about four years of good health, but at the end of this time he began to suffer much from hæmorrhoids, and to these he refers all his present symptoms, for shortly after this he had pains in the epigastrium, coming on occasionally after meals, more especially if he had indulged in drink, or eaten indigestible food. These attacks were not constant or regular, and sometimes they did not occur for a month together. He describes the pain at these times as very severe, and states that he has often rolled on the ground in agony when it came on,—in fact, his description of the paroxysm much resembles the account given by patients suffering from the passage of a gall stone.

He was never jaundiced; he was never in the habit of using lead, and has no blue line round the gums.

At these times he always derived great benefit from the bowels being freely opened. Stimulants seem to have in-

creased the pain. No purgative medicine of any sort ever caused him any uneasiness, except aloes, which he could not take on account of the hæmorrhoids.

At this same period of his life he first became subject to attacks of vomiting; this came on after the pain, and always gave him relief. He also suffered occasionally from water brash. The fluid rising up to the mouth was tasteless, and not acid or saline: with this there often came on a feeling of giddiness in the head, and dimness of sight.

These symptoms have all increased, and for the last two years the paroxysms have been far more frequent, so that he has been obliged to abandon all employment. This has added mental distress to the bodily pain before suffered, and has helped to make him very nervous and excitable in manner; latterly he has often had regular hysteric fits of laughing and crying. If a smart tap be given with the fingers over the pectoral muscle, that peculiar local contraction of the fibres, which has been said by some to be characteristic of phthisis, immediately follows.

Having found by experience that vomiting always brings him relief, he has been in the constant habit of exciting this by large draughts of warm water at each return of the pain. His bowels have been habitually costive; to obviate this he has taken frequent doses of castor oil.

He first came under the care of Dr. Todd, in the early part of last winter, and vomited at that time about every other day. The pain which he suffered seemed gradually to increase in intensity until it reached a certain point, when sickness always came to his relief. The peculiar appearance of the vomited matter soon excited attention; it was examined under the microscope, and abundance of the sarcinæ easily detected in it.

He was then much benefited by the administration of morphia and creosote, and when he left the hospital regarded himself as cured, and passed five weeks without any vomiting, and almost free from pain. As an out-patient he still continued taking the same prescription, but from some cause (probably inattention to diet) the vomiting returned again, and since the end of last January he has, on the average, vomited about three times every week.

Three weeks before the date of his re-admission the pain became more intense, and the vomiting occurred every day.

When admitted on the 12th of July, his expression indicated great languor and depression of spirits, and he described himself as suffering great pain, which he referred to the epigastrium. No tumour could be felt in any part of the abdomen; the recti muscles were contracted and tense. The stomach, from percussion, appeared to be of unusual size, and the colon was distended with flatus. There was no marked enlargement of the veins on the surface of the belly; the liver and spleen appeared to be of normal size. He has never at any time vomited blood.

The heart and lung sounds were natural, the pulse not accelerated. The tongue was furred, especially behind. The saliva was very acid, and he complained of a disagreeable taste in the mouth resembling rotten eggs. He suffered much at times from hiccough, and eructations of fetid and offensive gas. The bowels were confined; the fæces hard and scybalous.

The urine was clear and pale, of natural acidity, sp. gr. 1·005. It contained no albumen. The skin was dry, and rather hotter than natural.

He vomited copiously the evening after his admission. The vomited matter had the same character as in the winter, looking like yeast in a state of fermentation. It was intensely acid; and when examined microscopically contained the sarcinæ as abundantly as ever. When filtered, the acid fluid, apart from the food, was of a very light yellow colour, clear, of sp. gr. 1·012. On evaporation there was very little residue. Nitrate of silver gave a dense white precipitate, sol. in NH_3, insol. in NO_5. It appeared, therefore, to consist, partly at least, of free hydrochloric acid.

He remained in the hospital for a fortnight, during which time he only vomited twice. The treatment consisted of a milk and flour diet, only allowing the patient to take this in small quantities at a time; and, in addition, a mixture with acid. hydrocian., dil. ♏v.; sodæ s. carb. grs. x.; aq. ℥ss.; ter die.

The bowels were also regulated chiefly by the use of enemata. The alkali was given here for two reasons—firstly, on account of the vomited matter being very acid; and, secondly, because it had been observed during the previous winter, that if the vomiting ceased to be acid no sarcinæ could be found.

The case above narrated is the second of the kind which has lately come under notice at this hospital. The first happened about sixteen months ago. The patient's name was Rogers; he was 38 years of age, and a man of sedentary habits; his life had always been temperate; previous to admission he had been living badly. He had suffered from flatulence and sour eructations for some years, and four months before he came in he passed a pint of blood by stool. The case was regarded as one of previous ulceration at the pylorie orifice of the stomach, which, by cicatrization, had caused narrowing of the outlet. The stomach was much enlarged as in our present patient. The vomiting, which at his first admission occurred regularly every day, came on about three or four hours after meals; the vomited matter was precisely similar in appearance and character to that in the case just described. It always gave him immediate relief.

This patient, who was also under the care of Dr. Todd, left the hospital much benefited from the use of morphia and creosote in the form of pills; unfortunately the case has since been entirely lost sight of. (a) R. J.

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THE MEDICAL TIMES.

SATURDAY, AUGUST 17.

GROSS MALPRACTICE BY AN UNQUALIFIED PRACTITIONER.

The brief report, which appeared in this journal, of a case of malpractice, by an unqualified practitioner, so gross and so palpable as to call for an inquest upon the body of the ill-fated woman, is verified in every particular, by the provincial paper, and by the documents remitted to us.

"On Monday evening last," we find reported in the *Halifax Guardian*, that "an inquest was held at the Royal Hotel, St. James's-road, on the body of Ann, wife of Charles Saunders, leather-dresser, Launceston-street, of this town, whose death had been occasioned by the gross neglect and utter want of skill of Mr. Thomas Fawthrop, residing in the Square, and practising under the firm of 'J. Fawthrop and Co., surgeons.'"

It is unnecessary to quote from the *Guardian* the whole of the non-medical evidence adduced at the inquest, suffice it, that from that evidence the following facts are proved, viz.: That Mr. Thomas Fawthrop had been called in to attend upon the deceased at two o'clock on Saturday morning, that he had remained with her till half-past eight, that he then left her, returning however at eleven, from which hour he

(a) The readers of the *Medical Times* will recollect a series of similar cases described by Dr. Bushnan as having occurred in the practice of Dr. Hassé, of Zurich.

continued with his patient till one o'clock. At about one o'clock "he attempted something twice, and failed in it." Deceased exclaimed: "Oh, dear doctor, you have killed me." But he said, "Oh, no, I have not; you will get it over directly." It further appears that soon after this Mr. Fawthrop again left, and did not return till twenty-five minutes to four o'clock; that he now only waited a few minutes, but returned at four, when he was soon after followed by Mr. Harrison. What took place at this hour will appear hereafter in Mr. Harrison's evidence. The non-medical evidence only proceeds to show that Mr. Harrison soon left the patient in Mr. Fawthrop's hands; that Mr. Fawthrop himself left her at six o'clock, and that he did not return "till betwixt nine and ten." Mr. Harrison had been sent for at about nine o'clock. He was in the room when Mr. Fawthrop arrived. The woman died at about ten o'clock—*undelivered*.

One curious fact, told most naturally by the nurse in her evidence, tells us also how much the common rules of medical etiquette—or ethics, if this word pleases better—are neglected, if understood, in some districts,—those rules which engender honourable feelings towards honourable men, and which discountenance all unprincipled truckling to the unworthy in our profession, and to quacks out of it, who, it may be, have it sometimes in their power to place an ill-gotten fee in the pocket of the regular practitioner.

A short quotation from the evidence of *Isabella Jackson* will, we think, be a sufficient apology for this sentence of digression:—

"This," continued the nurse, "was about one o'clock. After he (Mr. Fawthrop) had spoken to this neighbour woman, he asked to see the husband of the deceased, and suggested it would be better to have further aid. He said, 'I can save you a guinea if you like; *you* have no occasion to get another medical man, as *I* will bring one with me.' Mr. Saunders said, that money was no object to him. About half-past three Mr. Fawthrop called again, and said that he would meet Mr. Harrison at four o'clock."

Mr. Harrison was the first medical witness examined, and his deposition is as follows:—

"Mr. T. Harrison, surgeon, said, that on Saturday afternoon, at 3 o'clock, Mr. Fawthrop called at my house and said he had a difficult case of labour, and wished me to go. I told him I should not be of much use as my right hand was lame. He told me he only wanted my opinion, and not to do anything. He promised to pay me, and I went according to appointment at 4 o'clock. I saw deceased, and found her very weak, with a sinking pulse of upwards of 140. I made the usual inquiries. She complained of an acute pain in the left side and lower part of the body. I told Mr. Fawthrop there was no time to be lost, and then made an examination myself. (Mr. Harrison then described some symptoms of the case.) I asked how long she had been in this way. Mr. Fawthrop said since 1 o'clock. I told him she ought to have got over it at 1 o'clock. There cannot be two opinions about this, and if I had been there it would have been done. (Mr. Harrison then described a futile attempt which Fawthrop made to give relief; he then took the case in hand himself, and succeeded immediately, leaving her in the usual way.) Previously to that it had struck me she was suffering from a rupture of the uterus, and I told Mr. Fawthrop so, but he said he did not think so. She told me she had had the pain in her side since 1 o'clock, when she felt something give way. I did not then know what Mr. Fawthrop had been trying to do. From the first I did not like her appearance, but Mr. Fawthrop said he thought she was only exhausted. He never told me under what circumstances she first experienced the pain in her side. When I left I told Mr. Fawthrop there was nothing but straightforward work for him. I told him I could not stay any longer, as I had left a case of my own, but wished him to give every attention, and to report progress to me. She complained of a fixed pain in her side all the time I was with her, but she had no other pains. Assuming the uterus to be ruptured these would naturally cease. I did not see her till near 10 o'clock, when she was dying. Mr. Fawthrop called upon me about 6 o'clock. I said, 'I suppose it is all over.' He said, 'No it is not.' I used rather a forcible expression to him, and told him to go back to her immediately, or he would get into a mess, for had it been my case I would not have left her for all the world. I was surprised that Mr. Fawthrop had left her at all. He did not appear to think there was any rupture. I was quite satisfied when I saw her at 4 o'clock that there was very great danger. I think the case was improperly treated, and, as far as I can judge, I see no reason why the woman might not now have been alive. I have assisted to make a *post-mortem* examination. (Mr. Harrison entered into a minute description of what he saw.) Mr. Fawthrop is not a regular practitioner, and his name is not on the list of surgeons or apotheearies.

"John Lister, of Halifax, on his oath, saith: I am a surgeon. I attended the *post-mortem* made this evening of the deceased, by my direction. On uncovering the body of deceased, we found the right leg of the child protruding as far as the knee. On an incision being made through the abdominal muscles, the fœtus was found lying as low as the loins, external to the uterus, having escaped through a rupture thereof. There would be about three gills or a quart of blood in the cavity of the abdomen. The rupture was on the left side. The womb appeared healthy. Deceased appeared a well-formed woman. There was no deformity of the pelvis or any other part. I cannot, from what I saw, form any positive idea as to how the rupture was occasioned. Deceased was not a very little woman, and the child was not an extraordinarily large one. I am of opinion, that death has been caused by rupture of the uterus. I know very little of Mr. Fawthrop, but I believe he is neither a Member of the College of Surgeons, nor a Licentiate of Apothecaries' Hall. I concur in Mr. Harrison's opinion with regard to the treatment proper to be adopted in the case of a face presentation. I can form no opinion, except from what I have heard with respect to deceased having been neglected during the time of her labour.

"Laurence Bramley, of Halifax, on his oath, saith: I am a surgeon. I, assisted by Mr. Farrar, made a *post-mortem* examination of deceased this afternoon. On exposing the body, I found the belly much distended, and a child's leg protruded between the woman's thighs in a state of decomposition. On laying open the belly, I found the upper part of a child lying amongst the intestines. On examining further, I found that it had escaped through a rent or tear on the left side of the womb. There was about a pint-and-a-half of dark blood, partly coagulated, partly fluid, in the cavity of the belly. The rupture of the womb was large enough to admit the head, shoulders, and a part of the chest of a full-grown fœtus; and I am of opinion that it was the cause of death. We withdrew the child through the rupture. The placenta was not dislodged, but completely attached to the upper part of the womb. I cannot say whether the rupture has been occasioned by the natural contraction of the womb, or by the hand of an operator. It is, however, a very unusual thing for rupture to occur in cases of natural labour; and, even in turning, it is a rare occurrence. The woman ought to have been delivered, and that whether the rupture existed or not. And, so far as I can judge from the *post-mortem* examination, there was no natural impediment to that, there being no disproportion between the mother and the child, and the child smaller than the average—weight 5lb. 7oz. Deceased was a short and rather stout woman; but, in all other respects, well formed. I should not think of turning a child, except under extraordinary circumstances, in a case of face presentation. I should not, under the circumstances I have heard detailed on this inquiry, have considered it safe or proper to have left the deceased, as it appears she has been. The child was a female.

"Thomas Fawthrop, of Halifax, being cautioned in the usual way, that any statement he might make would be taken down in writing, and might be used as evidence against him, proceeded to state to the following effect, viz., that he was called to attend upon Mrs. Saunders at two o'clock on Saturday morning last; that he found her progressing in labour in a case of face presentation; that she went on favourably until eleven o'clock, when she wished him to make use of instruments to relieve her, as the pains were excruciating. He told her that she could do nothing better than bear down with the pains; that he would leave her a short time, as such cases were always tedious ones. On re-

turning, at about twelve o'clock, he stated that little progress had been made, and that the 'face of the child was jammed in the superior aperture of the pelvis;' that the child was dead, and that the cuticle of the face pared off when he examined it. He then waited two hours, but no change having taken place, he stated that he determined to turn the child, and, to allay uterine action, gave forty minims of tincture of opium; that he then introduced the hand into the womb partially, but that uterine action came on, and 'expelled his hand, and the child's hand, after his, over the child's face.' It was at this crisis that he determined upon having a consultation. A consultation accordingly took place with Mr. Harrison at four o'clock, when he states that the question was, whether the head of the child should be reduced, or whether the child should be turned; and that Mr. Harrison decided upon turning at once. Mr. Fawthrop then attempted to turn. 'He introduced his hand, got hold of one of the feet between his two fingers, but was afraid to bring the foot down for fear of rupturing the uterus, the pains being so great.' During the pains, he said that he 'rested with his open hand on the child; but the uterine action was so strong that it cramped his hand to such an extent that he was obliged to withdraw.' Mr. Harrison is then reported by Mr. Fawthrop to have turned in three minutes, and to have left the case soon thereafter with him, saying that all was right. Mr. Fawthrop stated, that he remained with the woman after Mr. Harrison had left, for about an hour, administering to her a little brandy and water, to recover her from the shock of turning; that the pains did not return whilst he remained, but that she felt sleepy; he then left her also, to allow, as he said, nature to recover her strength. At that time he declared, that neither he nor Mr. Harrison had any idea that there was rupture of the uterus, and that Mr. Harrison told him so. At eight o'clock messengers came to him, saying that Mrs. Saunders was just in the same state as when he had left her, and that the pains had never returned, to whom he stated that she required a little more brandy and water, in order that she might recover her strength before he attempted to remove the child. Mr. Fawthrop concluded his evidence by stating that he had attended upwards of fourteen hundred cases of midwifery.

"The deputy-coroner then proceeded to sum up the evidence, and charge the jury, who were a considerable time in considering their verdict, which they ultimately returned as follows.—'The jurors, upon their oath, do say, that the said Ann Saunders, on the 27th day of July, 1850, at Halifax, being pregnant with a certain female child, departed this life in consequence of a rupture of the uterus, occasioned during the violent and lingering pains of labour; but how, or by what means the said rupture was occasioned, no sufficient evidence thereof doth appear to the said jurors. And the said jurors further say, that one Thomas Fawthrop, of Halifax aforesaid, was, during the period of the said labour, in attendance upon the said Ann Saunders, in the capacity of an accoucheur, and for the purpose of aiding and assisting her in her said labour; and that the said Thomas Fawthrop did not then and there exercise due care and proper skill in the treatment of the said labour, but manifested great incompetency, want of attention, and gross neglect in the management thereof.'

"After reading over the verdict to Mr. Fawthrop, the Deputy-coroner said he was desired by the jury to express to him their strong opinion with regard to his treatment of the unfortunate case which had been the subject of the present inquiry. It appeared that he was called in at two o'clock on Saturday morning, and remained with the deceased until about half-past eight o'clock; that he then returned at eleven and stayed till one o'clock, when he left her in the most dreadful state of suffering until four o'clock, without affording her the least aid whatever. The jury considered he had manifested the most gross neglect, and a complete want of skill. There wanted but one connecting link in the evidence to have caused his committal to York upon a verdict of manslaughter. He could assure him that he had had a very narrow escape of having such a verdict returned against him, there being only one or two of the jury who entertained any doubts to the contrary. He must in conclusion state, that he entirely concurred in the censure passed upon him by the jury.

"The Foreman of the Jury (Mr. Duncan) said, that he hoped the present case would be a warning to Mr. Fawthrop, and he (Mr. Duncan) hoped that he would desist from practising again as a medical man until he was legally authorised to do so. He could assure him that he had had a very narrow escape indeed, and the next time he might not be so favourably dealt with.

"Mr. Fawthrop (who was evidently much excited) said, the whole case had been got up by Mr. Harrison; and as to the insinuation thrown out by Mr. Duncan, he begged to tell him, that he practised under his brother, (Mr. Joseph Fawthrop,) and he would continue to do so. In the midst of these violent remarks the Deputy-coroner interfered, and said that Mr. Fawthrop had proved himself to be guilty of the most gross neglect and utter ignorance of the case he professed to treat; such was the recorded opinion of the jury, and he must now leave the room. Mr. Fawthrop then retired."

The inquiry lasted from six o'clock on Monday till nearly two o'clock on Tuesday morning.

From the following announcement, which appeared in the advertising columns of the same paper in which this case is reported, it seems that Mr. Thomas Fawthrop groundlessly asserted that he practised under the sanction of his brother.

If any doubt previously existed upon this point, it is now clearly settled; and, however painful it must have been to a brother even to seem to injure the prospects of one so near to him, still the announcement was necessary; and, the unpleasant duty to the profession now performed, entitles Mr. Fawthrop, of Queen's Head, to our highest commendation; and it would be well if all regular and licensed practitioners would act in a similar spirit towards those who have not even the claims of consanguinity, and discountenance the very unprofessional system, now too common, of engaging cheaply the services of the unlicensed, of druggists, of brother practitioners' apprentices, and the like, and of working such under their name and patronage, to the underselling of the services of the humble but worthy and honourable licensed practitioner.

The announcement alluded to is transcribed from the *Halifax Guardian* of August 3, and runs thus:—

"Mr. Fawthrop, of Queen's Head, near Halifax, surgeon and apothecary, begs leave respectively to intimate to his medical and other friends, and to the public generally, that he is not now, nor has he been, in any way, directly or indirectly, professionally connected or identified with the firm or practice of 'Fawthrop and Co.,' advertised near the Talbot Inn, Halifax.

"In putting forth this public announcement, Mr. Fawthrop is influenced by none other motive than that of correcting what he is told to be a prevailing impression, that he is mixed up with the practice now carried on at Halifax, at the place of business of his late father. Mr. F. need hardly again repeat that his own practice and that advertised as 'Fawthrop and Co.,' at Halifax, are totally distinct and irrespective of each other.

"Queen's Head, near Halifax, 1st August, 1850."

Having now reported this case, as nearly as possible, in the language of the parties examined at the inquest, it must appear to all, that the principal medical evidence ought to be that of Mr. Harrison—the surgeon called in to the case at four o'clock.

The lay-witnesses only testify to those facts which were finally summed up by the deputy-coroner in his short charge to the jury, viz., that for vast intervals Mr. Fawthrop was absent from his patient, when, according to the opinion of all, he ought to have been present with her, alleviating, as he might have done, by the aids of medical art, her sufferings.

The adventitious medical evidence, if we may so call it, was of two kinds—it spoke to facts observed at the *post-mortem* examination of the body; and, relative to these and other facts, the evidence was speculative or opinionative. The first species of evidence proved the existence of a semi-putrid female child, having one leg protruding through the natural orifice, whilst the head, shoulders, and part of the

chest, lay embedded in the intestines of the mother, having escaped into the cavity of the abdomen, through a large rent in the upper and left side of the uterus. It proved, also, that there was no disproportion between the mother and the child, the child being smaller than the average, only weighing 5 lb. 7oz.; whilst the mother was well formed in every respect. The opinionative medical evidence was brief, but expressive in some respects, whilst in others it may appear defective. It may be summed up thus:—"I cannot, from what I saw, form any positive idea as to how the rupture was occasioned."—(Lister.) "I cannot say whether the rupture was occasioned by the natural contraction of the womb, or by the hand of the operator."—(Bramley.) "I can form no opinion, except from what I have heard, with respect to deceased having been neglected during the time of her labour."—(Lister.) "*The woman ought to have been delivered*, and that whether a rupture existed or not." * * "I should not think of turning a child, except under extraordinary circumstances, in a case of face-presentation. I should not, under the circumstances I have heard detailed on this inquiry, have considered it either safe or proper to have left the deceased, as it appears she has been left."—(Bramley.)

As Mr. Fawthrop was the party accused of malpractice, and as Mr. Harrison was the only medical man who was present during a portion of Mr. Fawthrop's attendance upon the deceased, it may be as well to place portions of their respective evidence in juxta-position, whereby we shall be saved the necessity of adding many concluding remarks, and by this means also it will more evidently appear why the jury could not return any other verdict than that which they did return together with their appended and appropriate censure.

Mr. Harrison.	Mr. Fawthrop.
"At four o'clock she complained of acute pain in the left side and lower part of the body, just over the womb."	At four o'clock "was afraid to bring the foot down for fear of rupturing the uterus, the pains being so great." * *
"She had no labour pains so long as I stayed."	"The uterine action was so strong, and cramped my hand to that extent, that I was obliged to withdraw it." * *
"I found no contraction of the uterus when I introduced my hand to turn."	"Mr. Harrison returned in three minutes and left the case all right as he said."
"I would have delivered her as soon as I found it out (the arm protruding); that ought to have been done most certainly; there cannot be two opinions about it." * *	"I waited some time for the pains, but they did not return."
"Judging from the symptoms I thought she had a rupture of the uterus, and said so to Mr. Fawthrop." "I was satisfied at four o'clock that she was in great danger."	"At that time I had no idea of rupture of the uterus, neither had Mr. Harrison; he told me so."
"I think that at one o'clock it could not have been a face-presentation, otherwise the delivery might have been effected safely."	At one o'clock "the face of the child was jammed in the superior aperture of the pelvis."
"I am of opinion that the case was improperly treated from the time of the first attempt to turn, assuming it to have been a face-presentation."	"On several occasions have attended Mr. Harrison's entire practice; he must either have had full confidence in my medical abilities, or he must have been doing a gross injustice to his patients."
"Had the case been treated properly and judiciously, in my opinion the woman's life might have been saved."	"I have attended in my time upwards of 1400 cases of midwifery."
"Deceased ought not to have been left, after the child was turned, until delivery had taken place." "I am of opinion that she has been neglected."	"Mr. Harrison turned, and soon after left the case to me, 'all right,' as he said."
"Mr. Fawthrop's name is not on the list of surgeons or apothecaries."	

The length at which we have noticed this case precludes us from making, at present, any further observations. But, while we agree with Mr. Bramley and Mr. Harrison in the opinion, that the woman had been most grossly neglected and maltreated by Mr. Fawthrop, and, while we agree with every word of the censure of the Jury, we cannot entirely exculpate Mr. Harrison; for, *according to his own evidence*, he considered that Mr. Fawthrop ought to have delivered her *at one o'clock;* but how much more necessary was it, that he himself should have delivered her at *four o'clock*, when, in addition to her state at one o'clock—viz., the arm presenting—Mr. Harrison considered her "in great danger," and, as he said he suspected, with rupture of the uterus. We cannot refrain from asking, how could he, with so great experience, leave a woman in such a state to an unlicensed practitioner? Why did he only bring down *one* leg, and leave her *thus* with the man he so much abuses? Was any point of professional etiquette or professional habit likely to be compromised?

We trust the recital of this case, to which we have devoted so much space, may not be without its proper effect; and that it may be a means of uniting more closely the regular practitioners, and of discouraging that baneful practice now so common, of licensed men employing, at a cheap rate, those who possess no qualification.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

On the Theory and Practice of Midwifery. By Fleetwood Churchill, M.D., M.R.I.A., &c. &c. Illustrated by Woodcuts. Second Edition. Pp. 496. London. 1850.

The two questions one naturally asks on taking up a book are, What end had the writer in view? Has he attained that end?

A manual is a treatise on any subject intended to convey to the learner a condensed and lucid account of the present state of a particular science. It has been objected to manuals, that they tend to induce a superficial knowledge,—that they replace original productions; for it is evident that a good manual must be, in a great measure, a compilation. The rudiments of a science are common property. The more recent advances in particular branches of any given science, say physiology, have been the result of the combined labours of many original minds and hands. To present a view of the present state of physiology, the results of the labours of Liebig, Marshal Hall, of Müller, Henle, Valentin, &c., must be condensed and explained. Therefore we say, it is evident that a book giving a view of the present state of any science must be necessarily a compilation. We are prepared to maintain, that such compilations have been, and are of incalculable benefit to the science of medicine. What student, in the four short years devoted to the attendance on lectures, has time to consult the writings of the aforesaid authors on their special subjects? What student can master the two large volumes of Henle's general anatomy, (and much even of that admirable work is compilation,) then search Müller's Archives, Virchow's Journal, and the thousand-and-one French and German periodicals in which original papers, bearing on general anatomy and physiology, are scattered? Imagine a tyro of nineteen called on to weigh all the evidence for or against the contradictory assertions he will there meet. Let him make similar researches with reference to chemistry, medicine, &c., and we promise a youth profoundly ignorant of the rudiments of his profession.

Would we have a man's learning limited, then, to the contents of a manual? No; far from that, we would have

him well read in the writings of original observers. In medicine, we would bid him ponder on the pages of Louis, Chomel, Bright, and Walshe; and, in the collateral sciences, study the works of their cultivators. But we are satisfied, from long experience, that his subsequent labours will be materially lightened, and the knowledge he acquires be rendered more available in practice, if he has previously attained a general view of the subject,—a view which is only to be attained by the use of a good manual.

Dr. Churchill has produced, in the work before us, a capital text-book for the use of students in midwifery,—one to which practitioners may apply with advantage. The manual—in fact, though not in name—is one of the very best of its kind. It is got up precisely in the same style, even to colour of the binding, as those published by Mr. Churchill, and in no way is it unworthy of a place beside them.

Dr. Churchill has brought together, arranged, and drawn deductions from, a greater number of facts than any other author on the subject with which we are acquainted. His statistical researches display great learning, and a just appreciation of the value of numerical results. The fact that this book has passed into its second edition, shows that it is appreciated by the profession.

First Report of the Metropolitan Sanitary Association, &c. Published by the Association. 1850. Pp. 102.

We are glad to see that the sanitary reformers are beginning to exhibit signs of returning vitality. We were afraid they had exhausted themselves in giving birth to the General Board of Health, or regarded that Institution as the consummation of sanitary desires. That this is not the case appears from a very able and useful document which has just reached us, and which designates itself as the "First Report of the Metropolitan Sanitary Association." The Sanitary Association is, we understand, the successor of the defunct Health of Towns Association, or rather is instituted by many of the active members of that body. We miss, nevertheless, some of the more honoured names of those who figured in that useful agitation; and we miss, too, in the document before us, much of that cogent and unanswerable array of facts which made the strength of the Reports of the Health of Towns Association.

The Sanitary Association are dissatisfied with the general aspect of sanitary reform. They complain that the Public Health Act, which was passed two years ago, was inefficient, and remains so; that the Nuisances Prevention Act is powerless; that the Metropolitan Sewers' Act is most unsatisfactory; and that, in fact, nothing worth noting has been done during the last two years to carry out the measures contemplated by the originators of these enactments. Consequently they array again the various plans which they deem it necessary the Legislature should adopt, and are proceeding to agitate as heretofore, and, by a friendly pressure from without, to force on in the path of sanitary reform our present friendly but quiescent Government.

Their present Report is well planned for this purpose. It gives a kind of history of sanitary reform, so as to fill up the interregnum of the last two years; it then proceeds to enumerate *seriatim*, the several measures which, in the absence of one comprehensive scheme, it recommends!—such as, among other minor measures, the abolition of the window-tax, the supply of water, making of sewers, removal of nuisances, prevention or alteration of unhealthy trades, and last, not least, the improvement of the dwellings of the poor.

The Association are very severe upon the present Commission of Sewers, and most justly so. This body are absolutely worse than useless, for they impede everything. They appear to have been overwhelmed by the 170 plans which were sent in for the drainage of the metropolis, and to have not yet recovered the effects of the shock. It is clear that, some of these days, another supercession must take place. The Government found the last Commission too active, according to all accounts; and, certainly, inactivity is better than a gigantic error. Yet our present Commissioners might move a little quicker; and we hope the Association will put some life into them.

The Association also have taken up, with a curious kind of cautious criticism, the question of the constitution of the Board of Health. We think they might be a little bolder on this point. Why not say at once, that the Board of Health should be a medical board,—not, perhaps, altogether; there may be, here and there, a lawyer or an engineer, whom it may be for the interests of sanitary reform to put upon the Board; but the basis of the Board should be medical. If it is not, it will eventually fail—at any rate, partially—in attaining the great object for which it is founded.

We recommend this Report to all our brethren, and beg them to aid, as they have already so ably done, in the carrying out this great work, so that the profession of the nineteenth century may be, in the history of medicine, for ever distinguished as the founders of sanitary reform.

The Bath Waters: their Uses and Effects in the Cure and Relief of various Chronic Diseases. By James Tunstall, M.D., Edinburgh, late Resident Medical Officer of the Bath Hospital. Pp. 144.

Dr. Tunstall was induced to prepare this work from the belief that, as, with the exception of the short notices in the works of Dr. Granville and Mr. Lee, no treatises on the Bath springs had issued from the press for nearly thirty years, their virtues and utility in the treatment of a certain class of diseases were comparatively unknown. Few members of the profession could better perform the task, Dr. Tunstall having acted as resident medical officer to the Bath Hospital, where he observed the immense benefits produced by the thermal Bath treatment alone, in diseases which ordinarily baffle the medical skill even of the most profound. Influenced and urged on by the opportunities he thus possessed of classifying these diseases, of tracing cause and effect, and of contrasting previous treatment in the one case with that which had been pursued in another, our author commenced a system of case taking, which he continued from 1843 to January in the present year, when he began to arrange his facts for the press. The result is the acceptable and useful book before us.

The first four chapters of the work are dedicated to the consideration of the general properties of the Bath waters,—their analysis, the diseased conditions in which they are beneficial, and those which counter-indicate their use, the dict and regimen to be observed while they are being taken, and the mode of employing them.

The water of the thermal bath is at all times at 115°, a degree of heat to which Dr. Tunstall attributes much of the benefit derived from the use of the waters, "as it enables them to produce their exhilarating effects by the introduction direct into the system, of free carbonic acid, united with saline materials, and a chalybeate in an extremely minute state of subdivision, while by their internal administration, they stimulate the capillary vessels of the stomach, increase the nervous energy, and the volume and frequency of the pulse; promote the secretions, more particularly of the liver, skin, and kidneys, and thus restore impaired and disordered functions to their natural condition. In their external administration, they brace the extreme vessels of the skin, enabling it to secrete healthy perspiration in those forms of disease in which this function is depraved or unhealthy: in general terms, it may be said to improve the quality and vigour of the circulating fluid by producing a direct tonic effect on the heart and arteries."

The diseases in which these waters are most beneficial are those nervous complaints which do not involve the cerebro-spinal system, such as chorea, sciatica, and neuralgia; next come the local palsies, from the absorption of lead and other minerals into the system; after these there are certain skin diseases, such as lepra, psoriasis, eczema, impetigo, ptyriasis, porrigo, tinea capitis, and their various subdivisions and complications. Then we have chlorosis and other functional disorders of the uterine system, anæmia, and general debility. In gout they are employed with the most signal and almost universal success; and they are equally efficacious in chronic rheumatism. In chronic stiffness of the limbs after injuries, and in chronic injuries of the spinal column, after inflammation has entirely ceased, they are also useful. In the same way, after active symptoms have ceased in hip disease, they much improve the general health. Diabetes, marasmus, and critical periods of uterine life are occasionally benefited by their use. In hemiplegia from cerebral disease, and paraplegia, the result of inflammation, or disease of spinal marrow, but little benefit can be expected.

The Bath waters are admissible only in cases of chronic disease; their use is contra-indicated by the disease being complicated with epilepsy, recent apoplexy, phthisis, and

scrofula, disease of the heart, acute diseases, chronic abscess or ulceration, paralysis of the sphincter muscles, and hæmorrhages.

A passage at page 22—23 will serve the purpose of many a temperance lecturer :—

"There is one point which, although incidentally noticed by writers on this subject, has not received that attention which its importance demands, and that is, that these waters are the best remedy that can be used to wean the habitual indulger in strong potations of (from?) his propensity to drink. The stomach, in these unhappy cases, experiences a craving, which is relieved by a glass of the Bath waters; the dyspepsia is relieved, not at the expense of fresh fuel added to the already burning heat, but with a grateful fluid which moderates its rage. The glow of health is substituted for that of a feverish excitement; and a steady course of the waters will speedily cure the vicious propensity, in some instances by producing a smart attack of gout, heretofore latent in the system; and in others, by supplying energy to the injured organs, which enables them to resist and subdue the morbid propensity, by the restoration of their healthy functions."

Several chapters are taken up with a short description of the respective diseases to which we have alluded, the circumstances under which the Bath waters may be used, the requisite precautions to be adopted, the correlative treatment to be pursued, the diet employed, exercise to be taken, &c.

Dr. Tunstall's book contains a considerable amount of information respecting the thermal springs of Bath, and he has afforded his professional brethren some useful knowledge relative to their use in certain diseases.

On Excision of the Enlarged Tonsil, and its Consequences in Cases of Deafness; with Remarks on Diseases of the Throat. By W. Harvey, M.R.C.S., &c. Pp. 122. Woodcuts.

If those who are placed in a position to acquire an extended experience by their connexion with hospitals, infirmaries, or dispensaries for a special disease, were to follow the example occasionally set, and impart the information they have thus acquired, although one evil would ensue,—that of the publication of a large number of books,—yet, in the long-run, a large amount of valuable knowledge would be obtained, and, by a properly conducted series of deductions, &c., first principles might be adduced, by which the progress of the medical sciences would be greatly facilitated and advanced.

Some few years ago the medical journals were inundated with papers and cases, tending to show that in many instances deafness depended on, or was caused by, enlargement of the tonsils, and might, and could be, and was cured by their excision. The operation was accordingly practised wholesale; it became as common to cut out a man's tonsils as it had been a short time before to divide the internal or external rectus oculi to cure a squint. In some of these cases relief, or a cure of the deafness, was boldly asserted to have been the result of the operation. Cases of failure,—we write from memory,—were rarely, if ever, referred to, and few, if any, of those who published, alluded to any evil consequences as likely to result from what was termed so simple an operation as the removal of the tonsils. That these organs are of some use in the animal economy, there cannot be a doubt, for the Almighty Creator would not otherwise have placed them in the important position they hold. What that use is has not yet been determined, but it would appear that the "tonsil snippers" of that day did not look upon them as other than mere appendages to the frame, or they would scarcely have endangered, we will not say life itself, but the comforts and services of existence. A sufficient time has now elapsed, to enable us to judge of some of the physiological and pathological effects of this operation. It was of course necessary that the person who undertook the task should be some one who had had experience in the disease for which the operation was recommended, and who, from his connexion with a public medical institution in the very town where the operation had been largely practised, would be likely to have under his care many of those who had been subjected to this mutilation. All these desiderata are to be found in the author of the work before us. Himself a qualified surgeon, and an aurist by profession, yet not restricting himself in practice to the specialty, so that his mind remains uninfluenced by any peculiar bias, he comes to the task he has undertaken, with clear, unprejudiced thoughts, and opportunities that few can boast of. We are bound at the same time to state, that Mr. Harvey's work is not merely an *exposé* of the results of this operation. Other matters are also investigated.

The first portion of the work is occupied with the anatomy and physiology of the parts concerned. To this we need not here allude, although there are some points in which the author differs somewhat from generally received opinions.

The results of Mr. Harvey's experience, the nature and extent of which we have already alluded to, have led him to the following propositions or conclusions :—

"1st. That the enlarged tonsil, or elongated uvula, does not, *per se*, give rise to imperfect hearing.

"2nd. That its extirpation does not only not remove deafness, but on some occasions causes it.

"3rd. That in cases wherein the tonsil is enlarged, the disease is in the mucous membrane generally, and that its morbid condition, when remediable, is so only by means of a judiciously-regulated constitutional treatment.

"4th. That the tonsils are not merely secreting organs, but play a further and most important part in the animal economy, holding as they do most intimate sympathies with important, though distant organs.

"5th. The extirpation of the tonsil in the young has led to pernicious results, such as giving rise to bronchial and pulmonary disease, with other mischiefs; and, notwithstanding the high authorities in favour of extirpating the tonsils or uvula for the relief of deafness, the operation has almost uniformly proved a failure."

Our author brings forward cases in illustration of these conclusions, and further endeavours to prove a connexion between the tonsils and the reproductive organs by quotations from authors, and by the history of cases in which, after their excision, peculiar changes in the organs connected with the reproductive function took place. The evidence in support of the fifth proposition or conclusion, Mr. Harvey says he obtained from the examination of a great number of children, in whom the tonsils had been removed for apparent obstructions to respiration; the result being, that the operation produced considerable disturbance in the pulmonary apparatus, both in the mucous membrane of the bronchi, and in the parenchyma of the lung itself.

"A few words sum up the consequences of excision.

"Experience has satisfied me that the removal of the tonsils gives rise occasionally to deafness, that it enfeebles the frame, injures the constitution, affects the system in general, and alters the nutrition of the body. It is no reason, but rather the contrary, that, because the tonsils may readily be removed, the operation should be performed on every frivolous occasion; and finally, it is my belief that the evils I speak of would long since have become manifest, but for the generally imperfect nature of the operation, by which the base or radical of the gland is in reality left untouched."

With this extract we must conclude our notice, stating at the same time our opinion that medical practitioners will derive benefit and instruction from the pages we have reviewed.

On the Management of Infancy; with Remarks on the Influence of Diet and Regimen, etc. By Charles Hogg, M.R.C.S., L.A.C. Pp. 132.

Works of this kind, evidently addressed to the non-professional members of society, as much as to medical men, are generally looked upon with an eye of suspicion. The book before us, however, hardly falls into the same predicament. It appears to be a fair and dispassionate essay on diet and regimen, as adjuvants in the prevention and treatment of disease, strengthened by quotations from some of our best writers. The author's views are good, and are fairly carried out. His precepts are worth following. The work is neatly written and likely to be productive of much good. Such books are adjuvants to the physician, and tend greatly to lessen his toil.

The Accommodation of the Eye to Distances. By William Clay Wallace, M.D. Pp. 36. New York. 1850.

The author states, that adjustment of the eye to distances has been variously ascribed to alteration in the diameter of the pupil, to alteration in the form of the organ, to muscularity of the crystalline lens, and to alteration in the posi-

tion of that lens. These various theories he examines, and arrives at the conclusion, that the last is the most correct. He then proceeds, by a minute description of the structure of the corpus ciliare, to prove that it is through the agency of that body that accommodation of the eye to distance is accomplished. Mr. Bowman, in his Lectures, and also in his Physiological Anatomy, has proved, in the most convincing manner, that there are muscular fibres in the ciliary body, by the action of which the lens can be advanced or retracted; and we are certainly surprised at finding, in the pamphlet before us, no mention of Mr. Bowman's investigations, although they are by far the most important which have taken place for some years. Dr. Clay Wallace may possibly not have seen his works; if such be the case, we strongly recommend them to his consideration.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

MESMERIC SWINDLING.

Some time since I mentioned to you that the police had made a regular razzia, as the saying is, among the medical magnetisers, and consigned the fair professors of that mysterious art to the safe keeping of the *Conciergerie*, the medical abettors of the farce being at the same time prosecuted for swindling. One of the trials came off a few days since, and ended in the condemnation of the parties accused. The lady was a woman named Mongreut, the "modern sibyl" no less, who exercised the profession of revealing future occurrences, and healing incurable maladies, at No. 20, *Rue de Seine*. She was in great vogue, and a prodigious quantity of letters from all parts of the country was seized at her domicile. The medical accomplices were a Polish doctor named Grabowski, and an apothecary of the same nation, called Sokolowski. The unfortunate doctor pleaded poverty as his excuse. He had sold his soul to save himself from starving. Five days' imprisonment was the mild sentence. The apothecary, against whom no proof of complicity existed, was acquitted, and the "modern sibyl"—having, in virtue of her avocation, foreseen the event—prudently disappeared from the audience, and was not to be found. She was condemned to pay a fine of 500 francs, and pass thirteen months in prison. Several other trials of a similar kind are in preparation.

STATUE OF LARREY.

I had the pleasure of assisting, on Thursday last, at the inauguration of the statue erected to Baron Larrey's memory, in the court-yard of Val de Grace. The ceremony was a most imposing one, for the most distinguished men of all professions had here assembled to honour the memory of one whose life had been devoted to humanity and science—to the great surgeon and to the soldier's friend. There were deputations from the National Assembly, headed by M. Dupin, from the Institut and Academy of Medicine, from the corporation and learned bodies, and all the surgeons of the National Guard, of the garrison of Paris, and many neighbouring towns, attended. A select body of *invalides* represented the army; but the most curious, and, at the same time, touching spectacle, was a small detachment of officers and soldiers of the "old army"—the glorious relicts of the Imperial wars—in their tattered uniforms of other times, the survivors of battles fought more than half a century ago, mustering round the marble image of the man who during life was their best friend.

You know on what occasion Larrey was raised to the rank of Baron. After the battle of Essling the soldiers were in the greatest state of destitution, without shelter, clothing, or even food for the wounded. Larrey seized on all the spare saddle horses that he could find, and converted them into excellent soup for his patients, using the cuirasses of the heavy cavalry instead of pots. The generals and officers complained to the Emperor, who summoned Larrey before him. "You have (said the great man) presumed to make soup for your patients with my officers' horses." "I have, Sire," replied Larrey. "Eh bien," said Napoleon, "je vous nomme Baron de l'Empire."

The statue of Larrey, the work of the great sculptor, M. David, of Angers, is admirable in art and resemblance.

SCOTLAND.

The interest attendant on the meeting of the British Association in Edinburgh was kept up to the end. Saturday, August 3rd, was devoted to excursions. On Monday the business of the sections commenced again, and on that day, for the first time, a Physiological sub-section met, apart from the Natural History, under the presidency of Dr. Hughes Bennett, Professor of the Institutes of Medicine in our University. It then appeared that there were papers enough to have occupied this sub-section on all the days on which the Association met. A considerable part of the Monday's meeting, in this sub-section, was occupied with a discussion on a paper by Dr. Carpenter, entitled, "On the Relative Functions of the Cerebral Hemispheres and Sensory Ganglia in Intellectual Operations." One of the principal points which the author tried to establish was, the importance of the intra-cranial sensory ganglia in consciousness; or, that these were not merely the seat of consciousness in sensation, but also the seat of the consciousness of intellectual operations; not that these ganglia are the organs of intellectual operations, but that, as they take cognizance of the impressions made on the external organs of sense, and are the seat of the consciousness of the sensations thence originating, so that, in a parallel manner, these ganglia, by means of nervous tracts, which may be termed the nerves of the internal senses, take cognizance of the intellectual operations performed by the cerebral hemispheres, and are the sole seat of the consciousness of these operations. Of the discussion which ensued, it is impossible, at present, to give even the faintest outline On that and the following day, three other metaphysical papers were read: one by Dr. Fowler, "On the Influence which our Instinctive Propensities have on our Intellectual and Active Powers,—that is, on Acting in Consequence of Thinking,"—on which a short discussion took place, in which Dr. Carpenter took a principal share. The second paper of this description was by Dr. Laycock, of York, "On the Relation of Consciousness to Reflex or Automatic Action." Owing to the shortness of the time left, only a part of the third was read. The paper was by Dr. Seller, and the purpose of it was to show that the metaphysical difficulties, as to the origin of the notions of space, of motion, of the external, of substance, &c., might be resolved physiologically on the two axioms, "that every sentient nervous filament is an independent instrument of sensation, and that every sensation involves an element of space,—namely, the point of space where the organic change produced by the impression originates, that is, at the peripheral extremity of the nervous filament concerned." That the infant thus comes to recognise the relative position of all the sentient points in the space occupied by the skin and muscular system, and that out of the element of motion besides involved in the sensation, attendant on the contraction of every portion of muscular substance supplied with a sentient nervous filament, he finally comes to recognise the external contact of one part with another of the zone of space occupied by self, and the resistance of one part of self to the intrusion of another part of self; and that, having at length acquired the knowledge of the properties of the body itself as a piece of matter, he quickly obtains the notion of the external, because when an external body is touched it is distinguished by the negative property of affording no consciousness of being touched like that afforded by every part of self. As the whole of the paper was not read, the entire view was not brought out. In the short discussion which followed, Professor Allen Thomson, of Glasgow, who was in the chair at the time, expressed his concurrence in the views of the author in so far as they were stated, at the same time drawing his attention to the probable importance of the sensations produced, during the motions of the extremities, in the sentient nervous filaments with which the joints as well as the muscles are so copiously supplied. Among the papers, besides those of a more general character read in this sub-section, were one by Professor Bennett, "On the Molecular Element of Growth in Plants and Animals," the purpose of which was to show, that the theory of cell-development could not be received without very large exceptions and modifications; another by Dr. W. T. Gairdner, entitled, "On some Facts in relation to Pathological Cell-development;" a third by Mr. Newport, "On Vital and Physical Forces;" and on all these

three discussions of interest arose. A paper by Professor Simpson was also of much interest, entitled, "On the Reproduction of the Limbs after Amputation in the Human Subject." He showed, that the power of reproducing and repairing lost parts was greatest in the lowest classes of animals, and decreased as we ascended higher and higher in the scale of animal life. He further pointed out, that the human embryo approached in this, as in other respects, the physiological life and powers of the lower animals; and, consequently, when the arm or leg is amputated very early in embryonic existence, as not unfrequently happened from bands of coagulable lymph and the results of disease, the stump structures reproduced a small rudimentary hand, as the crab or lizard does. He showed various casts and drawings of cases of hands thus reproduced, and two living examples were exhibited to the section. Among the other papers, were one by Dr. Alexander Wood, "On the Law of Development of Human Monstrosities;" one by Mr. Sanderson, "On the supposed relation of the Spleen to the development of the coloured Blood Corpuscles." A pigment pervades the spleen. Some physiologists have been led to account for the appearance of this pigment by supposing it to be a congeries of blood globules. Mr. Sanderson was of opinion, that it was occasioned by granular particles containing the red colouring matter attached to the coagulated fibrine. The other papers were one by Dr. G. Wilson, "On the existence of Fluorine in Blood and Milk;" Mr. Z. Zaglas, "On the Morphology of the Muscular System;" Dr. Coldstream, "On the Extent of Infantile Idiocy in the United Kingdom;" Mr. Spence "On some points in regard to the Ligature of Arteries;" and of more purely medical papers two, namely, Dr. M'William, "On the Use of Bofarcira *(Ricinus Communis)* of the Cape de Verd, as a means of exciting Lactation;" and Dr. J. Dalziel, "On Hysteria, Hydrophobia, and other Convulsive Affections, containing an Analysis of the Phenomena of Water-dread."

In the Physical section a very interesting paper was read, August 5th, by a French savant, M. Ch. Martins, "On the Meteorology of France." He divided France into six climates; but a few words on the sixth, or Mediterranean climate, as a specimen, must suffice. The Mediterranean, or provençal climate, is one of a peculiar kind, and is more like that of Genoa and the north of Italy than of France. The mean annual temperature is higher than in any other part of France, and is nearly 15 degrees centigrade. Although the annual quantity of rain is 500 millimetres, it all falls in a few days, chiefly in the autumn. The summer is remarkably dry; storms are not common, but very violent. This climate would be altogether the finest in France, were it not for a north-west wind, called the "mistral," which blows with extreme violence down the basin of the Rhone, and is very injurious both to the crops and the fruits, and even to the health of the inhabitants. It seems to have been scarcely known until the cutting down of the forests in the south, which formerly protected this region from its fury. M. Martins stated that they had begun the publication of a work, containing the results of the meteorological observations made in France from year to year, two volumes of which he presented to the British Association. At the same meeting a Report was read from a Committee appointed on one of the previous days to examine the site and state of a tree recently struck by lightning in the neighbourhood of Edinburgh. The tree was an oak of ordinary size, standing at some distance from any other trees; there was coal below the surface, and black band, which is rich in iron ore; the place is one which has been several times struck with lightning; the wood of the tree was split into a multitude of pieces, so that parts of it resembled bundles of lucifer-matches; the lightning had taken the direction of the greatest moisture, and the disintegrated force seemed to have been chiefly the sudden expansion of the moisture. In the Chemical section, a communication "On the Mode in which the Earth Conducts Electricity," transmitted by Professor Matteucci, was read; also one by Dr. Scoffern, "On a New Process for the Manufacture of Cane Sugar;" another by Dr. J. H. Gladstone and Mr. G. Gladstone, "On the Growth of Plants in Atmospheres of Different Gases;" another by Dr. Lyon Playfair, "On the Relative Values of the Dietaries in use by the Different Classes of the Population;" the result of the paper is to show that, in spite of all the improvements of chemistry, we are as yet in almost total ignorance of the exact nature and quantity of the food required for the maintenance in a healthy condition of any of the classes of the population. In a paper "On the Air and Water of Towns," Dr. R. A. Smith pointed out the remarkable power which masses of sand and porous soil possess of rendering water, which was previously coloured and unwholesome, pure and palatable, when it is filtered through them. He urged upon those interested in the supply of water to towns the importance of the fact, that the best variety of it is not rain water, or other soft waters, as has been generally supposed; but those which have been percolated through porous strata, and have thereby been deprived of vegetable matter, and impregnated with carbonic acid. On the last day, various additional papers were read in the Chemical section: "On the Soap-test," by Mr. Campbell; "On the Changes in the Tesselated Pavement discovered a year ago at Cirencester." In this pavement, the flowers in the head of Flora had become green, as the leaves were; but it appeared that the flowers had been originally red, and had become green owing to the change of the red oxide of copper by the action of the air into the green carbonate. There were communications also from Professor Mülder, Mr. Stein, and Dr. J. Anderson,—the latter gentleman showed a beautiful combination of codeine with iodine.

Such is a selection of some of the subjects treated of at this meeting, most likely to be of interest to the readers of the *Medical Times*. To enter on all the papers and all the discussions carried on during four days for four or five hours in each, would far exceed any reasonable limits.

The business of the sections was carried on without interruption from 11 to 3 or 4 o'clock. The important object of promoting a free intercourse among the members assembled, commenced by breakfasts at various private houses. The venerable Professor Jameson, now among the Fathers of Geology, assembled his guests to breakfast on several mornings at the early hour of eight. In the afternoon dinners were the order of the day; the first of these took place the day before the meeting of the Association, being the usual graduation dinner, which was this year held in the Senate Hall of the University, and, instead of being confined, as in ordinary seasons, to the principal and the professors concerned in the graduation, was enlarged by the presence of some of the strangers who had already arrived. The next was given on the 2nd of August, by the Royal College of Physicians, to a large party of the most eminent members of the Association, in the Hopetoun-rooms. About a hundred sat down to dinner, including the President, Sir David Brewster, the late President, Dr. Robinson, Lord Catheart, Lord Enniskillen, the Lord Provost of Edinburgh, Sir Philip Egerton, Sir John Forbes, Sir Charles Malcolm, Sir Charles Pasley, Count Breunner, Professor Airy, Professor Daubeny, Professors Royle, Owen, E. Forbes, Carpenter, of London; Professors Buchanan and Arnott, of Glasgow; and Stevally, of Belfast; Professors Hyrtle, of Vienna; Van der Hoeven, of Leyden; Rangabe, of Athens; Kuffer, of St. Petersburg, &c., &c. On the same day the Lord Justice-General gave a dinner, which took away another portion of the distinguished strangers. The next dinner was on Monday, namely, the annual dinner of the Association, at which about 200 were present. On Tuesday, Mr. Syme, as president of the Royal College of Surgeons, gave a dinner to 120 guests at his villa near Morningside. It was given in a pavilion erected on purpose on the lawn, and the whole effect was magnificent beyond conception.

Mr. Syme was most fortunate in the beauty of the evening, which heightened the natural charm of the landscape. Numerous pots, with palms and other gorgeous exotics, adorned the open side of the pavilion; a military band was stationed on the lawn, and the pipers of the Highland regiment, now in Edinburgh Castle, played their pibrochs in the intervals of the more cultivated music.

Two evenings were appropriated to popular lectures: one on Thursday, August 1, was given by Dr. Bennett, "On the Circulation of the Blood in the Capillary Vessels;" the other, on Monday the 5th, by Dr. Mantell, "On the Extinct Birds of New Zealand." On the other evenings there was a promenade; and on one of these a lecture was given by Mr. Nasmith, "On the Structure of the Moon." After the lecture some part of the company amused themselves with a quadrille. Among the dancers we were glad to see Sir Roderick Murchison, in particular, distinguish himself.

DURHAM.

A meeting has been held in this city, convened by circular, to form an association for the purpose of raising funds for prosecuting unqualified practitioners. It was urged that, if an association of the kind were formed, their attention should be directed to illegal practitioners as well as unqualified. This proposition was negatived by several illegal practitioners voting in the majority; and the association is now formed for the purpose of finding funds to prosecute all unqualified practitioners; but it is feared its usefulness will be inoperative where it is most wanted—where quackery of the worst kind is carried on to a disgraceful extent—*i. e.*, where there is a compact, or understanding, or partnership between the physician and druggist. A system has of late sprung up where the physician gives his advice gratuitously to the poor, with a prescription expressly ordered to be taken to a certain druggist.

This practice is carried on so long as the poor can find ready money to pay for the medicines, which frequently amounts to 5s. in a week. When their last farthing is expended, they are recommended to apply to some subscriber to the Infirmary for a ticket. In other cases, however, where they have money, but are no longer able to attend at the physician's house, he (the physician) offers to attend them at their own homes, for which he charges 1s. and upwards for a visit, as he can best screw it from them. In other cases, when the advice is not wanted gratuitously, and where the patient is attended by a legal medical practitioner, nothing is more common than for the prescription to be ordered to be sent to the favoured druggist. Cases do sometimes occur where the prescriptions are duly compounded by the general practitioner, and everything appears to progress properly, and the patient recovers; but then the physician will pay what he calls his friendly visit. This is repeated a second or a third time, or until an opportunity offers for him to undermine and supplant the general practitioner.

The public are unfortunately the last to discover and estimate the value of such proceedings; and the system, it would appear, has grown up in this town to an enormous extent.

The fair and just grounds the general practitioner has for complaint are, that the physician, under the plea of charity, deludes the public and robs the general practitioner, by sending all prescriptions to the druggist. But what is to be done? The powerful aid of the press is the only remedy—the press, supported by every legally qualified practitioner in the kingdom, with every legitimate means taken to open the eyes of the public, and guard them against the quackery of the day, and expose to open daylight this system of double dealing, which is so exceedingly reprehensive in every point.

GENERAL CORRESPONDENCE.

GRADUATES' COMMITTEE.

[To the Editor of the Medical Times.]

Sir,—As an individual member of the Committee of Graduates of the University of London, I beg to offer a few comments upon an article which appeared in the *Medical Times* for July 27, reflecting on the constitution of that Committee. As your observations appear to me to be founded on imperfect, if not erroneous information, and might prejudice the cause in which the graduates are engaged, I trust that you will give this letter early insertion.

It is objected that the Graduates' Committee does not fairly represent the graduates; and it is inferred that the Committee is "afraid freely and honestly to submit the election of a committee to the graduates at large."

The objection is based upon a limited appreciation of the facts of the case; and the inference is a simple assumption in diametrical opposition to the feelings of the Committee.

To arrive at an accurate and candid opinion as to the relation of the present Committee to the graduates, it is necessary to look back upon the unsatisfactory and disjointed condition of the graduates at the commencement of the present movement, scarcely two years ago. At that time probably no ten men, educated at different colleges, had ever met to discuss matters in which they had a common interest as fellow graduates. The liberal object of the founders of the University, to enable men of various religious persuasions to obtain and enjoy degrees which should confer rights and privileges equal to those attached to degrees of the older English universities, seemed in danger of being lost sight of altogether; and even the right of the graduate of medicine to use his hardly-earned academical title was threatened by a powerful corporation.

The juncture was urgent: there was no organisation by which the hostile proceedings of other bodies could be watched, or by which the academical interests of the graduates could be protected. The Senate, from their connexion with other universities, and by the elevated social and scientific rank of many of its members, were unable to comprehend the wants of the graduates. Without the means of obtaining authentic information as to the position and wishes of the graduates, the Senate was, to a great extent, powerless to take such steps as were necessary to guard the interests of the University. Unless the several elements of the University were united, it seemed clear that the University itself, as a great instrument of education, as well as the individual graduates, might receive irreparable injury. It seemed to those who originated this movement that individual interests, as well as the stability of the University, could not be effectually promoted without incorporating the graduates with power to express their sense of the wants of the University, and the means of influencing, in a constitutional manner, the direction of its affairs.

To compass these objects, the gentlemen who originated this movement did what the circumstances of the case permitted. They, in the first place, invited all those to join them who were favourable to the undertaking. When it was ascertained beyond a doubt that their opinions were shared by a large number of graduates, the Provisional Committee called together a preliminary meeting of all those graduates whose addresses could be readily obtained. A large meeting assembled, and appointed a temporary Committee. This Committee was a perfectly open one; every graduate willing to aid in the movement was invited to act upon it. A general meeting of graduates was held on the 8th of June, 1848. A printed list of twelve graduates in arts and laws, and twelve in medicine, was submitted. This list had been drawn up with the most conscientious care, to secure a body of gentlemen who would represent, as fairly as possible, the different institutions affiliated to the University, and who were able and willing to devote themselves to the difficult task before them. The meeting unanimously adopted the list, declining the vote by ballot which was proposed by the Committee, and giving the Committee so appointed power to add to their number.

The Committee have always used the privilege of adding to their number, with the earnest desire to constitute a body representing every class and interest among the graduates, without any regard to personal friendship or even acquaintance, to the strengthening of any particular policy, or to excluding any one who might advocate measures to which the majority of the Committee might be opposed.

The Committee was unanimously re-appointed at a second general meeting held on 27th February, 1849; and, again, at a third general meeting held on the 26th February, 1850, with such additions as had been made in the manner indicated.

There is, therefore, abundant reason to believe that the Committee possesses the confidence of the great majority of the graduates, and they have, on several important occasions, been able to co-operate with the Senate in attaining measures eminently conducive to the advancement of the University. Up to the present stage of our proceedings, I think it must be admitted that it would have been difficult to secure the services of so efficient a Committee in any other way than that which the graduates have followed. I readily allow that the mode of election, hitherto unavoidably adopted, is not the best for the future; but I must refuse you, Mr. Editor, or any one out of the Committee, the merit of first suggesting that the time is come for adopting a better. Long before your article was written, or, indeed, before objections had been raised in other quarters, the subject had engaged the spontaneous attention of the Committee; and a sub-committee had been appointed with the express function of considering the most effective and satisfactory means of submitting the election of a committee to the graduates at large. Some of the proposals under discussion are even more liberal than the one you have pointed out.

I believe I may say with confidence, that there is no desire

on the part of any member of the Committee to retain a position which is not sanctioned by the deliberate authority of the graduates. I have no doubt, indeed, that one and all will cheerfully resign, if the graduates desire it, an office which involves considerable expenditure of time and inconvenience; which exposes them to much misrepresentation as to the motives which actuate them; and which brings no personal advantage or gratification but the consciousness that they are promoting the well-being of the University, and deserving well of their brother graduates.—I am, Sir, &c. Robert Barnes, M.D.

Gloucester-terrace, Hyde-Park, Aug. 7, 1850.

P.S. I beg leave to append a postscript to the above. A correspondent who shrouds himself under the pseudonyme of "Senex," and who yet most unaccountably returns you "public thanks," has made a statement which, although unauthenticated, I will beg permission to correct. "Senex" seems to accuse the Committee of being the cause of a supposed unhappy position of the graduates with respect to the Senate. If, by this expression, it is intended to convey the idea that the position of the graduates in relation to the Senate is in any way impaired by the proceedings of the Committee, I would observe, that it is altogether without foundation. In considering so important a change in the constitution of the University as that proposed by the graduates, it might be anticipated that difference of opinion on some points would arise between the Senate and the Graduates' Committee; but there certainly is no ground for the assumption, that there has occurred any interruption to the courtesy and good feeling which have prevailed in the communications between them. On the contrary, I feel persuaded that the Committee would gratefully acknowledge the promptitude and cordiality with which their representations on behalf of the graduates are always received by the Senate. R. B.

August 13, 1850.

[Dr. Barnes may be assured that we never give an opinion editorially without having first satisfied ourselves of the facts of the case; and we can further inform him, there is not a statement in his letter of which we were not as fully informed before we received his communication as we are at the present moment. Our charge against the Graduates' Committee is fully borne out by Dr. Barnes's own evidence. The Committee felt, according to their Secretary, that by no free election could so able a Committee as the present have been chosen; *i.e.*, self-election was better than open election; or, in other words, that the graduates at large were not wise enough, or well-informed enough, to be trusted to elect their own committee. And be it remembered, that this was felt by the Committee at the very moment when they were urging the Government to allow those ill-informed graduates to elect the Senate.

Dr. Barnes must know as well as we do, that the so-called *election* of the Committee at a general meeting was a mere farce. The slighest opposition on the part of any of the graduates was met by a display of temper calculated to deter right-minded men from provoking a still further unseemly exhibition. We think we have heard, that, at the meeting in 1849, one of the Committee, for his ungentlemanly expressions, received a pretty plain intimation, that he at least was not a favourite representative of those assembled.

If, by the present mode of election, a committee fairly and honestly representing the graduates has been obtained, why are the Committee themselves about to change the system of election?

In February, 1850, it was necessary that the present Committee should, after long deliberation, determine *for* the graduates at large, who of their fellows were best suited to represent every class and interest among them; as if every class and interest could not take care of itself! What sudden light has fallen on the great body of the graduates, that they are *now* supposed to be able to choose for themselves fit representatives?

We care not whether or no we were the first to suggest an improvement in the constitution of the Committee; but this much we will assert, if the Committee had felt the false position they occupy as strongly as we see it, they would have adopted in February, 1850, that which Dr. Barnes informs us they are one day to adopt, viz., an "effective and satisfactory means of submitting their election to the graduates at large."

We cannot but thank Dr. Barnes, the secretary of the Committee, and therefore well informed of the sentiments of its *active* members, for having so fully corroborated the accuracy of our assertions, and, we add, also of our inferences.]

DR. GONDRET AND HIS TREATMENT OF CATARACT.

[To the Editor of the Medical Times.]

Sir,—I beg to thank you for the insertion in the *Medical Times* of an article on my work entitled, "De la Flamme à Petites Dimensions, &c." I do not wonder at the writer of the article being too incredulous to place confidence in the efficacy of my treatment of cataract. *Credat Judeas!* Universal practice condemns me. If he, or any other medical man, will get together a hundred or more cases of ocular inflammation, amaurosis, and cataract of different kinds, I will hold myself in readiness to come over and give him ocular demonstration.

The author of the article has committed an error, which grieves me exceedingly, because it charges me with ingratitude: "*All the medical world conspire.*" In what page of my work is that complaint? Nowhere! The truth is, the three surgeons at the Hôtel-Dieu who were opposed to me, viz., Dupuytren, Breschet, and Samson, always treated me with marks of the highest esteem; but one of them, Samson, was desirous to obtain my place of 10,000 francs a-year. More than ten physicians of the Hôtel-Dieu countenanced my works, even in verbal processes, which must still exist if not destroyed. These physicians injured themselves by the testimony they gave in my favour. Ever since the year 1833, they have used their influence in my behalf; but they have not been able to protect me from the effects of the anti-professional prejudice of the three surgeons above mentioned. These physicians had proved the efficacy of my method in the treatment of cataract, as well as of ocular diseases. Samson, however, instead of adopting my treatment, which, during more than two years, he had seen me apply in 200 or 300 cases a-day, spoke of it only with contempt. Since that time, it would have fallen completely into discredit, if Lisfranc had not, as long as he lived, (as it is ascertained in his works,) employed it with uniform success, and if A. Berard, who was subsequently appointed to succeed Samson, had not, towards the latter end of his life, (which, unfortunately, was but very short,) frankly and extensively put into practice the same treatment. Since the death of Lisfranc and Berard, the old treatment has again been resorted to; and the number of blind persons in France from the year 1833 to 1845, has increased to 30,000.—I am, &c.,

L. F. Gondret, M.D.P.

Rue St. Honoré 343, Paris, August 8, 1850.

IRREGULAR MATURATION OF THE VACCINE PUSTULE.

[To the Editor of the Medical Times.]

Sir,—A communication, under the above head, having appeared in the last number of your journal, I was induced to refer back to some Notes on Inoculation in 1849, and found that, in the months of April, May, and August of that year, I had seven such cases of irregular maturation of the pustule, viz., two on the 10th day, one on the 11th, two on the 12th, and two so late as the 14th day after inoculation. The two last cases occurred in children of the same age; healthy, of different families, and each inoculated from the same sources. With lymph obtained from these two children, I inoculated (experimentally) five others, and in four out of the five the pocks were fully formed by the 8th day; in the other child it did not take effect. This year I have only met with three cases of irregularity, viz., two on the 11th and one on the 12th day.—I am, Sir, &c.,

T. Waldron Bradley.

Kidderminster, August 12, 1850.

ANOTHER WORD ABOUT CHOLERA.

[To the Editor of the Medical Times.]

Sir,—In the twentieth volume of the *Medical Times*, pp. 80-81, I threw out a few observations upon the saline treatment of cholera. Nothing has occurred since then to alter my notions upon the subject; but, on the contrary, everything to encourage their tenure. In the valuable experiments of M. Cohen and Dr. Parkes on the blood, as detailed in the fourth number of your new series, I am of opinion that the followers of Dr. Stevens find much wherewith to uphold their treatment. M. Cohen recognises fibrine and albumen to be modifications of the same principle, and to be transmutable the one into the other. "When fibrine," he says, "is treated with a weak solution of soda at 40°, it loses its properties, and is changed into a substance which it is impossible to distinguish from albumen." "In inflammatory affections the quantity of salts of soda *is diminished*." "On adding a small quantity of a solution of soda we re-establish the normal proportions between albumen and fibrine." "The serum of the blood *is less alkaline*." "The increase of fibrine depends on the diminished alkalinity of the serum." These conclusions differ in this from Dr. Parkes,—that the latter allows *the presence of acetic acid* with chlorides of sodium or potassium, or other salts of soda or potash, to work his changes in the serum of the blood. He acknowledges, however, in a note, Dr. Buchanan's positions, (which are held irrespective of acetic acid,) viz., "that a portion of albumen seems to be deposited when chloride of sodium is added in excess to the serum, and that a little water *dissolves* this precipitate, and that the saturation of this water with salt again precipitates it." These researches, of course, are purely chemical. In looking for analogous changes in the living being we must expect the vis vitæ considerably to accelerate them, or superadd to them an influence peculiarly its own. Now, if it be correct to admit the convertibility of fibrine into albumen by means of a salt of soda; and, 2ndly, that albumen can be precipitated from the serum by chloride of sodium in excess; and, 3rdly, that this precipitate is *soluble* in water, I should say that Stevens's salines effect the same changes: the alkalinity of the serum is re-established, as are also the normal proportions of fibrine and albumen, and the blood consequently becomes fluid enough to circulate unconstrainedly, and again to revivify the pulseless victim of cholera.—I am, &c.,

James Joseph Coppinger, M.D.

Queenstown, County Cork, Aug. 6, 1850.

MEDICAL HONOURS.

[To the Editor of the Medical Times.]

Sir,—The long talked-of honours of the Bath to the superior old medical war-officers of the army and navy, still linger somewhere on the way!

Another hitch, or objection, seems to indicate a grudging, ungenerous reluctance in the powers that be, to bestow the decoration upon this meritorious class of men, and thus to elevate them to the rank and consideration which every liberal minded gentleman must regard them to be entitled to, after long and faithful service, as well as the fighting officer. They have generally performed the important duties required of them energetically and fearlessly; and it is very obvious that the strength of both services depends on the health thereof, and that chiefly on the manner in which the varied functions are discharged by the medical officers.

These gentlemen, during years of anxious service in all climates, are especially exposed to contagious influence and all the casualties of war, as well by land as by sea; and, in order to stimulate young medical and chirurgical aspirants of talent and respectability to enter the public service, and have something to look up to, the heads of the list should undoubtedly be honoured with their just reward, especially as it will lay no pecuniary burthen on the country. F.

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—From the attention which you have, in your valuable periodical, paid from time to time to the subject of medical ethics, and, from the peculiar advantage to be derived from cases that have actually occurred in preference to theoretical ones, I submit the following for your opinion:—

"A female in comfortable circumstances, about to be confined of her first child, engaged an accoucheur to attend her. After doing so she took fright, and preferred leaving her own home to put herself under the care of a provincial practitioner, who had known her from her infancy, and who was the medical attendant of her father's family. He was requested to undertake the care of her; consequently he prescribed, and promised his assistance when required.

"When taken ill the practitioner who was engaged to attend happened to be with a lady in labour whom he could not leave, when, of course, the next nearest practitioner was sent for, to whom the circumstances were fully explained, and regret expressed at the impossibility of obtaining 'her own doctor.'"

In such a case, what ought the practitioner who was actually in attendance to have done? Aware of the facts, was he justified in appropriating the case to himself without any communication whatever with the medical man who had been engaged to attend? (!)—I am, &c. Inquirer.

Newcastle-on-Tyne, Aug. 7, 1850.

[Had the practitioner last called in been animated by those high principles of honour which we wish to see common in our profession, he would assuredly have communicated with the practitioner engaged to attend the patient; at the same time, we think no court medical, if any such existed, would agree to condemn his practice.—Ed. *Medical Times.*]

REPORTS OF SOCIETIES.

ROYAL SOCIETY.

ON THE STRUCTURE OF THE MEMBRANA TYMPANI IN THE HUMAN EAR.

By JOSEPH TOYNBEE, Esq., F.R.S.,

Fellow of the Royal College of Surgeons in England, and Senior Surgeon to the St. George's and St. James's Dispensary, London.

In this paper the membrana tympani is described as consisting of the following layers, which are quite distinct from each other, both as regards their structure and functions.

1. Epidermis.
2. The proper fibrous layer, composed of
   a The lamina of radiating fibres,
   b The lamina of circular fibres.
3. Mucous membrane.

One of the principal objects of the paper is to describe the structure and functions of the fibrous laminæ. Since the time of Sir Everard Home, who pronounced the layer of radiating fibres to be muscular, anatomists have differed in their views of the nature of the fibrous element of the membrana tympani. The lamina of radiating fibres, the outer surface of which is covered by the epidermis, is described as continuous with the periosteum of the external meatus. With the exception of the uppermost fibres, which, on account of their being somewhat flaccid, have been considered as a separate tissue, under the name of "membrana flaccida," the radiate layer is composed of fibres, which extend from the circular cartilaginous ring to the malleus, and they interlace in their course. These fibres are from 4000 to 5000 parts of an inch in breadth.

The lamina of circular fibres consists of circular fibres, which are firm and strong towards the circumference, but very attenuated towards the centre. These fibres are so attached and arranged as to form a layer of membrane, which, in a quiescent state, is saucer-shaped.

The fibres composing the circular are smaller than those of the radiate lamina, being from 6000 to 10,000 parts of an inch in breadth.

The facts that appear to be adverse to the idea of the fibres of either layer being muscular, are—

1. The absence of distinct nuclei in the fibres.
2. Their great denseness and hardness.

It is next shown that the four laminæ forming the membrana tympani, are continuous with other structures of which they appear to be mere modifications, and that not one is proper to the organ.

The tensor tympani ligament, which had not been pre-

viously noticed by anatomists, is particularly described; it is attached externally to the malleus, close to the insertion of the tensor tympani muscle, and internally, to the cochleariform process.

The latter part of the paper is occupied by observations on the functions of the fibrous laminæ, and of the tensor ligament of the membrana tympani, and it is shown that by these two antagonistic forces, the one tending to draw the membrana tympani inwards, the other outwards, this organ is maintained in a state of moderate tension, and is always in a condition to receive ordinary sonorous undulations.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on

Friday, August 9.

Brandt, Thomas Arthur, Manchester.
Bury, John Carlton, Mitchelstown, County Cork.
Carrington, Benjamin, Lincoln.
Cashel, Rowan Francis, Silver-mines, Nenagh, County Tipperary.
Creed, Thomas, Ballinstona, Bruff, County Limerick.
Hill, Alfred, Wallsall, Staffordshire.
Mackenzie, Malcolm Monro, Friendville, near Aberdeen.
Mawhinny, Thomas, Belfast.
Riordan, Twiss, The Abbey, County Tipperary.
Scattergood, Thomas, Leeds.
Smithwick, John Humphrey, Gambousfield Cottage, Clonmel, Ireland.

The Court of Examiners sat for the last time this session on the 12th inst., when the following gentlemen were admitted members:—

Behrend, Henry, Canning-street, Liverpool.
Clarke, William Harrison, Kennetly, Kings County.
Egan, Myles, Tuam, County Galway.
King, William Talbott, Thurlow-place, Hackney-road.
Ridsdall, George, Hull.
Watts, George Henry, Newbury, Berkshire.

The Fellowship.—The usual examinations for this distinction took place in the College on the 5th and 7th inst., when Mr. Cornelius James Philbrick, of Kidderminster, whose diploma as a member is dated Aug. 17, 1838, passed his examinations and was admitted a "Fellow," at the meeting of the Council on the 8th inst. The following is a copy of the questions on Anatomy and Physiology, submitted to the candidates on this occasion, viz.:—

1. Describe the structure of the articulations of the head with the spine, the movements of which the head is capable, and the muscles by which these motions are effected.
2. Describe the root of the lung; its situation, connexions, its component parts, and their relative position.
3. Describe the œsophagus; its extent, course, relations with the neighbouring parts, and its component tunics.
4. Describe the lumbar plexus of nerves; its formation, situation, the branches which proceed from it and their distribution generally.
5. Describe the disposition of the peritoneum in the pelvis of the male and of the female.
6. Describe the femoral artery; its extent and course; its relation to the accompanying vein and to the adjacent nerves; mention the parts over which it passes and by which it is covered.

The following questions on Pathology and Surgery were submitted to the candidates on the second day, viz.:—

1. What are the soft parts of the body in which induration is most frequently met with as a consequence of inflammation, upon what does it depend, and what are the circumstances as regard the local action and state of the constitution which most favour its occurrence? How is it to be distinguished from indurated swellings dependent upon other diseased changes, and what is the treatment applicable to it?
2. In what does phagedenic ulceration differ from common ulceration? What are the characters presented by it in its progress and termination? How is it to be treated?
3. When caries attacks the cervical vertebræ, which of these are most frequently affected? Describe the symptoms and consequences attending it, the mode in which death is produced; and when recovery takes place, what are the necessary conditions of this? Specify the treatment which the disease requires.
4. Describe a case in which, after injury of the head without a wound of the scalp, you would infer that compression of the brain existed, was dependent upon effused blood, and that the blood was within the reach of the surgeon. Describe the proceedings you would adopt.
5. Describe the symptoms and consequences of stricture of the rectum, its most common situations, the organic changes upon which it may depend, and the appropriate treatment.
6. Describe the kinds of tumour found within the nose, their respective characters and treatment.

Answers to any four of the above questions in Anatomy, and Physiology, and Pathology, and Surgery were accepted as sufficient, provided, of course, that they were accurate and adequate.

The College.—The labours of the Council and Court of Examiners were brought to a close on Monday last for the session. The Library will be closed on the 23rd inst., and re-open on the 23rd of September. The Hunterian Museum will be closed the entire month of September, for the purpose of cleaning and dusting the preparations and books.

Fellowship Regulations.—From an advertisement on our wrapper it will be perceived, that the Council of the Royal College of Surgeons have most judiciously allowed candidates for the fellowship to present themselves for the classical examinations, any time after the completion of their eighteenth year. This examination in the Greek, Latin, and French languages, with the elements of mathematics, at so early an age, will permit the candidate to devote more particular attention to his professional studies.

The National Institute and Medical Reform.—The Committee of the Council of the National Institute have arrived at the following resolution:—"That this Committee, having considered the propositions contained in the letter from the Society of Apothecaries to the Right Honourable Sir George Grey, Bart., for altering the Apothecaries' Act of 1815, hereby declare, that they cannot support any scheme for regulating the education and conducting the examinations of the general practitioners in medicine, surgery, and midwifery, which is incomplete, or which does not embrace all the branches of education and practice necessary for the efficient performance of the duties of general practice. That, in particular, the Committee repudiate the remodelling of either of the existing institutions (as they have, hitherto, the establishment of any new institution) that is not based upon the unity of medicine and surgery, and which, in the education and examination for admission into such Institution (which is also intended to confer a title to practise) does not embrace all the branches both of medicine and surgery." "That the want of proper authority to examine in surgery has, at all times since the Act of 1815, operated prejudicially upon the examinations instituted by the Society of Apothecaries, and that this Committee unequivocally condemns any proposition to alter that Act which does not embrace an amendment in this essential point. That the unity of medicine and surgery has been the fundamental principle of the National Association and of the National Institute, and has been consistently adhered to throughout; and that without questioning the right of the existing Institutions to retain their special character, the Council resolves to adhere to this principle in reference to the education and qualification of the general practitioners as essential to any measure of medical reform."

Epidemiological Society.—The first meeting of the Council of the Society for the Investigation of Epidemic Diseases, was held at the residence of Dr. Babington, the President, on the 9th instant, when Dr. Addison was nominated as Treasurer, Dr. Roupell and Mr. Nussey as Auditors, and Sub-Committees were appointed to frame a code of laws, and for other purposes. Interesting communications were read from abroad by the President. The meeting was well attended, and the Secretary reported that several new members had joined the Society.

The Census.—The day for taking the population census has been altered to the 31st of March, 1851, instead of the day previously fixed, in June, to avoid the including the

large number of foreigners who are expected to be in London on account of the proposed exhibition in Hyde-park.

Royal Dispensary for Diseases of the Ear.—The half-yearly meeting was held on the 8th inst., Dr. Lightfoot in the chair. The secretary reported, that the amount of subscriptions received during the last six months, had in some measure decreased, owing to the decease of the late Queen Dowager, who had liberally patronised the institution for fifteen years. The surgeon, Mr. Harvey, stated, that 441 patients had been admitted since the last report, and 193 discharged cured.

Lunatic Asylums of England and Wales.—In a Parliamentary paper, just issued, we find that the receipts for last year for Bedford Lunatic Asylum were 6866*l.* 1s.; the expenditure, 6751*l.* 11s. 2d. Chester—receipts, 4915*l.* 19s. 6d.; expenditure, 3498*l.* 11s. 3d. Cornwall—receipts, 8197*l.* 14s. 11½d.; expenditure, 7697*l.* 3s. 9d. Devon—receipts, 9445*l.* 0s. 5d.; expenditure, 8621*l.* 12s. Dorsetshire—receipts, 3351*l.* 19s. 2d.; expenditure, 3100*l.* 14s. 6d. Gloucester—receipts, 16,264*l.* 10s. 1½d.; expenditure, 13,338*l.* 15s. 0¾d. Hull—receipts, 1093*l.* 8s. 2d.; expenditure, 890*l.* 0s. 8d. Kent—receipts, 9443*l.* 4s. 6d.; expenditure, 8558*l.* 4s. 11¾d. Lancaster—receipts, 28,577*l.* 11s. 2d.; expenditure, 29,953*l.* 11s. 2d. Leicester—receipts, 13,082*l.* 7s. 6d.; expenditure, 11,638*l.* 7s. 9d. Middlesex—25,419*l.* 1s. 9d.; expenditure, 24,537*l.* 18s. 2d. Norfolk—receipts, 5450*l.* 18s. 7d.; expenditure, 5514*l.* 16s. 11¼d. Nottingham—8573*l.* 18s. 3d.; expenditure, 8288*l.* 8s. 7d. North Wales—receipts, 6082*l.* 11s. 2d.; expenditure, 5965*l.* 6s. 8d. Oxford—receipts, 7574*l.* 13s. 4d.; expenditure, 6664*l.* 13s. 7d. Salop and Montgomery—receipts, 4035*l.* 0s. 6d.; expenditure, 3991*l.* 10s. 1d. Somerset—receipts, 7386*l.* 11s. 5d.; expenditure, 6766*l.* 19s. Stafford—receipts, 7456*l.* 12s. 3d; expenditure, 6563*l.* 5s. 3d. Suffolk—receipts, 5481*l.* 11s. 4d.; expenditure, 5676*l.* 8s. 1d. Surrey—receipts, 22,425*l.* 2s. 10d.; expenditure, 20,034*l.* 5s. 9d. North and East York—receipts, 5962*l.* 5s. 1¼d.; expenditure, 5962*l.* 5s. 1¼d.; West York—receipts, 11,511*l.* 11s. 11d.; expenditure, 12,051*l.* 0s. 7d. Total receipts, 218,597*l.* 14s. 11½d.; total expenditure, 206,065*l.* 10s. 0¾d. Four counties exceeded their receipts—*i. e.*, Lancaster, Norfolk, Suffolk, and West York. The expenditure of North and East York exactly equalled the receipts.

Military Appointment.—56th foot.—Acting Assistant-Surgeon Joseph Lawson to be Assistant-Surgeon, vice Cashel, deceased.

Naval Appointments.—Surgeons Samuel W. Webb (1845), to the Retribution, Alex. Woodcock (1844), to the Dauntless; and Edward Heath (1845) to the Flamer steamer at Portsmouth. Assistant-Surgeons Henry Stapleton Edwards to the Retribution, and Robert Wallace, M.D. (1845), recently serving in the Vengeance, 84, to the Dauntless.

Obituary.—At Ealing, lately, John Croft Croft, Esq., surgeon, late of Hayes, Middlesex, aged 28. Also, at Cardiff, last month, aged 78, Richard Reece, Esq., F.S.A., F.R.C.S. On the 6th inst., at Kingston, St. Vincent's, West Indies, James Snell, Esq., surgeon, aged 55. On the 9th June, at Foster's Bar, Yuba county, California, Dr. Bennett Lee Philips, of Panola county, Mississippi, aged 35. On the 9th, Mr. William Wheatley, surgeon, aged 45, formerly in the service of the Queen of Spain, and lately surgeon to the Kate, emigrant ship. Mr. Wheatley committed suicide, by shooting himself, in consequence of having lost the gratuity of 60*l.* for his services in the Kate, and being declared incapable of ever serving as emigrant surgeon again.

Yarmouth Hospital.—The income of this hospital for the past year amounted to 590*l.* 16s. 7d.; 399*l.* 15s. being from the annual subscriptions, and 130*l.* 17s. 3d. from collections at places of worship. The expenditure was—for housekeeping, 187*l.* 13s. 9d.; for drugs, 174*l.* 2s. 8d.; salaries and wages, 124*l.* 15s.; incidentals, repairs, new buildings, stationery, &c., 128*l.* 12s. 5d.: total, 615*l.* 3s. 10d. The number of in-patients was 108; of out-patients 620. A resolution was passed at the annual meeting, calling the attention of the Committee to the large expense for drugs; and it was also recommended that the house-surgeon should act as the hospital dispenser.

The Medical Interment Act.—Dr. T. Southwood Smith has been appointed the second paid member of the Board, formed in consequence of the passing of the Metropolitan Interment Act. The salary is not to exceed 1,200*l.* a-year, and the appointment is during pleasure. All appointments under this Act terminate when the General Health Act expires. Now that medical men have in some degree their claims allowed by the Government, there is hope for the profession.

Cholera.—In many parts of the United States, more especially in the southern districts, this disease was epidemic at the date of the last report. It had appeared at New Albany, Indiana, and eight cases had ended fatally. Another death took place from the disease at Evansville, Indiana, causing great consternation among the inhabitants. Twelve deaths in Harrison county, and fifteen in Clermont county, show the fearful character of the epidemic. The *Pittsburg Journal* states, that there have been three or four deaths daily for the past forty-eight hours, all of which were attributed to cholera; in some instances the spread of the disease seemed to favour the doctrine of contagion. At Louisville there occurred forty-seven deaths from the epidemic during the week,—four at Bedford-springs, Kentucky, four at Nashville, and four in Savannah county. The following paragraph from the *Cincinnati Commercial* gives details so horrible that they can hardly be matched in the filthiest of our rookeries. "In one house in Sycamore-street, above the canal, nine persons on Friday night lay sick at the same time with cholera, with none to attend them. When visited by the health officer, Dr. Tilden, on the following morning, five were dead, and the rest dying. The scene is described as horrible. The house was a low, dingy, dark, unventilated, filthy rookery, and seemed a pent-up box of every putrefactive odour known, such as would start cholera into life, had cholera never existed. Upon the floor lay a dead man, wallowed in filth, upon a bed two others in the sleep of death, with features distorted by the throes of departing life, and in an adjoining room lay two more dead, and four dying! Comment on such a fact were useless. The northern parts of the union are comparatively healthy. The last report of the Board of Health for St. Louis states, that for the twenty-four hours ending on Saturday, 4 p.m., the interments reached 60, of which 25 were from cholera; 25 also were children under 5 years of age. The next day at 6 p.m., the interments were 34,—16 of cholera, and 18 were children. At Cincinnati the Board of Health report, that there were 65 deaths in the last twenty-four hours,—of which 28 were from cholera, and 37 from other diseases. This epidemic still rages fearfully at Malta. On the 2nd instant, there were sixty-nine cases and forty-one deaths, being 66½ per cent. The 44th Regiment has been nearly decimated, and more than half Captain Carey's company have fallen victims. In Mexico, it is causing great ravages, and also at St. Louis. The disease is advancing towards Morelia and Zacutecas. At the date of the last report, it was extending in every direction, and was very fatal.

The Statue of Baron Larrey was inaugurated on the 8th instant, at the Val de Grace. General Pettit and many other veterans of the Imperial armies were present. When will such a thing be done for any of our medico-military or naval veterans? Will there be a public monument for Guthrie, when he is dead? Sterne was right: they manage these things better in France.

The Gloucester Charities.—The total receipts for the year 1848-9, for St. Bartholomew's Hospital, Gloucester, amounted to 996*l.* 3s. 1d., leaving 102*l.* 16s. 8½d. still owing. The charity possesses 4,967*l.* 3s. 3d. three per cent. consols, besides property let on lease. The expenditure amounted to 1,284*l.* 12s. 6¾d. The sum of 610*l.* 12s. 3d. is owing to the treasurer; 88*l.* 15s. 2d. were paid for medicines and the medical officer; a sum nearly equal to that, upwards of 82*l.*, being charged for incidentals—a new term for sundries, we suppose. The total receipts for St. Margaret's Hospital amounted to 129*l.* 4s. 2d., there being still a sum of 54*l.* 18s. 11d. uncollected. The total payments were 174*l.* 19s. 3d. St. Mary Magdalene's Hospital received 244*l.* 16s. 8d.; 35*l.* being the amount still in arrears. The total expenditure was 183*l.* 8s. 8½d, including 20*l.* 13s. for medicines and the medical officer. The Kyneburgh Hospital receipts amounted to 74*l.* 14s. 8d.; 35*l.* 14s. 3d. being still in arrears. The total expense was 67*l.* 2s. The total receipts for Sir Thomas Rich's Hospital were 1,436*l.* 13s. 6d.; 618*l.* 13s. 10½d., being the amount still uncollected. The

whole annual expense was 1,863*l.* 2s. 0½d., including 5*l.* 3s. 3d. for medicines, &c.

Mrs. Ramsden has left a legacy to the amount of 200*l.* to the Bath United Hospital.

California.—In California, there has been a curious practice adopted of publishing in the newspapers the names of persons labouring under disease, with the nature of the disease, and the results. Thus we have Wm. Penn, of New York, scurvy—cured; George H. Briggs, Boston, dysentery—convalescent; R. Slansen, New Bedford, syphilis—cured; Lawrence Jacobs, Boston, diarrhœa—dead; Henry Hanson, Norway, syphilis—cured; D. H. Parker, Lima, excoriation—cured; Calvin Wilbard, Massachusetts, arachnitis—dead; Samuel Oxex, Newport, R. I., mania a potu—convalescent; Mrs. Mary M'Coy, Port Phillip, parturition—convalescent; &c. &c. The report only wants the name of the attendant physician to make it complete. Such a proceeding would not do here.

On the Percentage of Nitrogen as an Index to the Nutritive Value of Food.—At the late meeting of the British Association, Professor Voelcker read a paper on the above subject. The nutritive value, as determined in this way, he believed to have been considerably overrated, and referred to certain experiments which he had made on fungi, which were remarkable for the quantity of nitrogen they contained, and were understood to be highly nutritious. Inaccuracy is often occasioned by the presence of ammonial salts in the juices of plants, and every practical chemist, he said, would hesitate unless his deductions were corroborated by actual feeding experiments. Dr. Christison thanked Professor Voelcker for his paper, and remarked that he had long suspected a fallacy in the method of determining the nutritive value of food as derived from the azote of nitrogen only. Dr. Daubeny expressed the interest he felt in the subject of the paper, and remarked, that he considered the presence of ammonia as the starting point from which all vegetable nutrition proceeds. Dr. Thomson thought that there might be some risk of a one-sided view of this question. Nitrogenous ingredients form only one of the constituents; we must look to the whole. Without certain salts, as Liebig observes, it is impossible to form healthy blood, and without healthy blood nutrition is impossible.—Dr. Lyon Playfair referred to Professor Voelcker's experiments, pointing out the error referred to as exceedingly important. It was lamentable to think how little was known as to the really nutritive qualities of different kinds of food—the nitrogenous or flesh-forming matter, the carbonic or heat-giving matter, &c.

HEALTH OF LONDON DURING THE WEEK.

The mortality in London is still increasing. The deaths registered in the last week were 997, while the deaths in the four weeks preceding were 781, 863, 898, 917. The increase in the time exceeds 200 a week. The deaths are, however, below the average of the corresponding weeks of 1840-9; after correcting for population, and excluding the corresponding fatal week of 1849, when the deaths were 1909, and 823 persons died of cholera. The corrected average is 1019, while the actual deaths were 997.

Small-pox was fatal last week to 15 persons, measles to 13, scarlatina to 21, hooping-cough to 25, typhus to 35, and erysipelas to 4. Nine deaths from childbirth were registered. The deaths from diarrhœa were 152; namely, 124 children under the age of 15, 9 adults between the ages of 15 and 60, and 19 persons of ages over 60. Of cholera, 12 children and 3 adults died. The number exceeds the deaths from cholera in the corresponding weeks of 1840-5, but is less than those in the corresponding weeks of 1846-9, when 37, 16, 19, and 823 deaths were ascribed to that malady. There is nothing to indicate the presence of an epidemic either in the number of deaths from cholera, or in the character of the cases; but the mortality from diarrhœa is an untoward symptom, which deserves the attention of those who have the power to adopt precautionary measures.

Of the 15 fatal cases of cholera recorded, 11 occurred amongst young children under 5 years of age, and 4 at more advanced ages. The particulars of each case are as follow:—On the 8th of August, at 21 Catherine-street, Limehouse, the son of a beer-shop keeper, "infantile cholera." In Kennington, at 5 Russell-terrace, the 4th August, a gentleman, aged 59 years, of temperate habits, "Asiatic cholera (10 hours.)" On the 3rd August, at 8 Elder-street, Norton Folgate, the daughter of a weaver, aged 5 months, "cholera Anglica (1 week)." At 17 Grundy-street, Poplar, the 5th August, widow of a lodging-house keeper, aged 49 years, "English cholera (6 days)." At 107 Long-lane, St. Mary Magdalen, Bermondsey, the 7th August, a daughter of a journeyman hearth-rug maker, aged 4 years, died of "cholera (10 hours):" the mother states that the child was in perfect health up to the time of the attack. In St. Mary Newington, 7th August, at 53 Paragon-row, the daughter of a labourer, aged 7 years, "English cholera (20 hours)." In the same neighbourhood, at 4 York-buildings, the 8th August, the daughter of a hatter, aged 11 months, "English cholera (18 hours)." At Clark's-buildings, Greenwich, the 3rd August, the daughter of a labourer, aged 6 months, "English cholera (6 days)." At 6 Blomfield-street, Dalston, the 3rd August, the son of a commission agent, aged 5 months, "infantile cholera (2 days), convulsions (5 hours)." On the 5th August, at 5 Hutchison's Avenue, Aldgate, the son of a labourer, aged 8 months, "simple diarrhœa (7 days), choleraic diarrhœa." At 1 East-street, Finsbury-market, Shoreditch, the son of a labourer, aged 4 years, "cholera maligna (12 hours)." Mr. Earles, the registrar, states that "the child was previously ill for seven weeks from intermittent fever. The neighbourhood is well drained and healthy." On the 4th August, at 97 Old-street-road, Shoreditch, the son of a greengrocer, aged 4 months, "sporadic cholera (4 days), convulsions (4 hours);" this house is imperfectly drained. On the 9th August, at 46 Carnaby-street, Golden-square, the daughter of a tailor, aged 3 years, "English cholera (24 hours)." At 34 Lucas-street, St. George-in-the East, 5th August, the son of a pattern-maker, aged 11 months, "English cholera with convulsions (16 hours)." On the 31st July, at High-street, Bromley, a grocer, aged 54 years, "broken constitution, English cholera (4 days)."

MORTALITY TABLE.

Deaths in the week ending Saturday, Aug. 10, 1850.

(Metropolis.)

Causes of Death.	Aug. 10.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	508	313	174	997	10318
Specified Causes	507	312	173	992	10255
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	243	31	27	301	3433
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	3	24	19	46	479
Tubercular Diseases	64	94	7	165	1877
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	40	30	30	100	1189
Diseases of the Heart and Blood-vessels	5	25	12	42	228
Diseases of the Lungs, and of the other Organs of Respiration	33	26	17	76	714
Diseases of the Stomach, Liver, and other Organs of Digestion	24	37	13	74	784
Diseases of the Kidneys, &c.	4	10	6	20	73
Childbirth, Diseases of the Uterus, &c.	...	8	2	10	61
Rheumatism, Diseases of the Bones, Joints, &c.	1	4	2	7	59
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	20
Malformations	2	...	...	2	27
Premature Birth and Debility	32	1	...	33	230
Atrophy	29	1	2	32	238
Age	...	...	29	29	449
Sudden	3	1	1	5	81
Violence, Privation, Cold, and Intemperance	24	20	6	50	300
Causes not Specified	1	1	1	5	63

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Aug. 10, 1850.	Sum of Ten Weeks.
London...	1948369	997	10318
West	301189	147	1401
North	376568	190	1826
Central...	374199	181	1887
East	393067	240	2318
South	503346	239	2886

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	23	Heart	39	Phthisis	109
Bronchitis	28	Hooping-cough	25	Pneumonia	32
Cholera	15	Hydrocephalus	27	Scarlatina	21
Childbirth	5	Influenza	...	Small-pox	15
Convulsions	30	Liver	11	Stomach	8
Diarrhœa	152	Lungs	9	Teething	15
Dropsy	17	Measles	13	Typhus	35
Erysipelas	4	Paralysis	16	Uterus	5

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	707	497	210
Females	684	500	184
Total	1391	997	394

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·743	64·3	58·7	+ 2·7	W.S.W.	S.W.	Miles. 130	0·00	
Monday	29·572	68·8	60·4	+ 7·2	S.W.	S.W.	40	0·00	
Tuesday	29·595	63·2	55·0	+ 1·5	S.W.	Calm.	30	0·06	
Wednesday	29·749	64·2	53·5	+ 2·5	Calm.	S.W.	130	0·01	Aug. 6, 3h. Positive and tension strong. This was the only time at which electricity was shown during the week.
Thursday	29·579	64·4	62·4	+ 2·8	S.	S.	180	0·09	
Friday	29·582	61·0	53·1	+ 0·4	S.W.	S.W.	235	0·00	
Saturday	29·736	63·5	54·7	+ 2·3	S.W.	S.W.	95	0·00	
Means	29·651	64·2	56·8	+ 2·7	S.W.		SUM 840	SUM 0·16	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

Disease in California.—Much anxiety is caused to the friends of emigrants by the extent of the mortality. Those who on landing congratulated themselves on having escaped the dangers of the sea, soon find that the dangers on the land are still more perilous. The causes of death are for the most part dysentery and land scurvy, contracted from bad food and insufficient clothing. Many bring the germs of disease with them, which, on arriving at "the diggings," become fearfully developed. At the diggings there is but scanty comfort for an invalid, and none but "picked" men can long survive the ordeals which emigrants have to undergo. There were but few well-marked cases of scurvy on board ship, but the system of each emigrant was morbidly bordering on it; and a few weeks at the mines without vegetables developed the disease. The malaria of the valley also aided to ensure a fatal result. Many, having waited till their means were exhausted, gathered into large towns, where, from want of proper attention and comforts, and from over-eating and improper food, scorbutus, dysentery, or confirmed diarrhœa closed the scene. The epidemic fevers during the last summer and autumn assumed a mild form.

TO CORRESPONDENTS.

The receipt of books, pamphlets and newspapers, letters, and other communications, are acknowledged from Medicus, Edinbugh; Mr. Ure, of Bloomsbury-square "An Account of a Tumour removed from the Neck," with engraving; Mr. Nunn, of Stratford-place, "On Varicose Veins and Varicose Ulcer," with engravings; Mr. Spencer Wells, R.N., "An Account of the Arterial System of the Lower Extremity Twenty-two Years after Ligature of the Femoral Artery," with engravings; Mr. Renshaw, "The Races of Men; a Fragment. by Dr. Knox." Pp. 478. London. 1850. Dr. Gondret, of Rue St. Honoré, Paris; Mr. Bateman, of Islington-green, "Operation on Hare-lip Four Hours after Birth;" Mr. Campbell, H.P., 55th Regiment; Messrs. Chapman and Hall, "How to Make Home Unhealthy," reprinted from the "Examiner." Pp. 82. London. 1850. Dr. Budd, Physician to the Bristol Infirmary; Dr. Verhaeghe, of Ostend, "Du Traitement des Maladies Nerveuses par les Bains de Mer." Pp. 93. Bruxelles. 1850. "Report on the Cholera in Boston." Pp. 180. Boston. 1850. Dr. Rigby, of Berkeley-square, "On Displacement of the Ovary;" Mr. Bradley, of Kidderminster; Senex; L. B.; Mr. Coles, of Cerne-Abbas; Dr. George M'Culloch and Mr. A. C. Maclaren, "The Phenomena of Pestilential Cholera," with plates. Pp. 123. London. 1850. Dr. Hutchinson, Physician to the Hospital for Consumption; Dr. Waller, of Finsbury-square; Pudor; X. Y. Z.; La Reine Pomarée; M. D.; Mr. Van Voorst, "Every Day Wonders; or, Facts in Physiology which all should know," with wood engravings. Pp. 137. London. 1850. Dr. Barnes, of Gloucester-terrace, Hyde-park; Mr. Annan, of Kinross; Mr. Toynbee, of Argyll-place; Mr. Tucker, of Berners-street; Mr. Van Voorst, "The Natural History of the Varieties of Men." By Dr. R. Gordon Latham, F.R.S., &c. &c. Pp. 575. London. 1850. Professor Lizars, of Edinburgh, "On Chloroform," *too late for this week*; X. Y. Z., "On the Gleet Question," *too late for this week*; Juvenis; Mr. R. J. Simaley; The "Whitehaven Herald;" Dr. Lightfoot in reply to Dr. Routh, *too late for this week*; Dr. Edward Chapman, of Edinburgh, "A Manual of Materia Medica, Pharmacology, Toxicology," &c. Pp. 415. Edinburgh. 1850. X.

We have to request that gentlemen who communicate papers and letters to be published anonymously, will, nevertheless, confidentially favour us with their names, not for publication, but as evidence of good faith. As a case in point, we have received a particularly good article, which we would readily publish did we know the name of the writer.

We will willingly publish a list of the Assurance Offices that remuncrate medical men, and those that do not, if our correspondent will furnish us with one that is authentic.

The Speculum.—We have received letters on this instrument and its appliances from Senex, L. B., Pudor, X. Y. Z., La Reine Pomarée, M.D., and Q. in the Corner. The tales told by six of our correspondents are too disgusting for our pages, neither can we believe them true; but, true or not, we will not aim so great a blow, or do so great discouragement to the Profession as to publish them. We extract from the letter of our correspondent, M. D., the following paragraph, to which we heartily subscribe:—

"The question lately raised upon this matter (the Speculum) is of grave and serious importance, and not to be approached in any but a grave and serious manner. Anything at all resembling indelicacy should be carefully eschewed. I am sure you will agree with me, that trifling on such a topic is improper *per se*, must be injurious to the character of any Journal, and damaging to the Profession in general."

Report of the South-Eastern Branch of the Provincial Association.—We very much regret our inability to give this week even an abstract of this important document. We propose, in our next Number, to lay before our readers some parts of it, with remarks arising from its perusal.

Medicus is referred for a reply to our last Number.

Mr. Campbell, late of the 55th Regiment.—Papers on Dracunculus, and on the Poison of the Guiana Woorara, will be very acceptable, although we fear, from the crowded state of our original communication box, it will be some time before we can publish them. We must give the preference to papers of a practical nature.

M. B., Cheltenham.—A plan of the instrument used in Dublin for the cure of Aneurism may be seen, page 604, Vol. XIX., "Medical Times." We believe *two* points of pressure are now used alternately on the artery—a great improvement due to the Dublin School.

B.—Tubercle and Cancer are not at all allied. As well expressed by Mr. Simon, "one is the antithesis of the other."

Dr. Roe's proof of his paper on the Cholera at Plymouth had not reached us when we went to press.

The letter of Mr. Lionel Beale, of Long-acre, will be inserted in our next Number.

X.—The Sir Robert Carswell who received the honour of knighthood from Her Majesty a few weeks since, is the same that formerly held the Professorship of Pathological Anatomy in University College, and whom a contemporary, the "Provincial Medical and Surgical Journal" not only represented as dead and buried, but whose last dying prophetic speech it printed for the information of its readers!

ORIGINAL LECTURES.

LECTURES

ON

THE CHEMISTRY OF THE POISONS.

By H. LETHEBY, M.B.,
Lecturer on Chemistry and Toxicology in the London Hospital.

LECTURE XVIII.

Phosphorous and its Compounds.—The Lucifer Disease.—Its History, Symptoms, Progress, and Effects.—Period of its Onset, its Duration, *Post-mortem* Appearances, Physical and Chemical Characters of the Dead Bone.—Pathology of the Disease.—Von Bibra's experiments on Animals.—Prophylactics.—Tests for the Phosphoric Fumes.

PHOSPHORUS AND ITS COMPOUNDS.

The knowledge that we possess concerning the true physiological effects of this element and of its several compounds is involved in much obscurity. We do not, for example, as yet appear to know how the poison operates on the animal frame, nor are we acquainted with the exact form in which it commonly manifests its action. In consideration of these difficulties, I shall occupy you for a short time, before we proceed to the chemistry of the subject, in discussing those peculiar effects of phosphorus which have been observed among the makers of lucifer matches. I am tempted to do this, not only by reason of the circumstance that we cannot individualize the operations of the several phosphoric compounds which are produced during the fabrication of the matches, but also because the consideration of these effects has not yet obtained a place in any of our standard works on medicine, surgery, or toxicology.

HISTORY OF THE LUCIFER DISEASE.

In England about sixteen years ago, and on the Continent a few years earlier, phosphorus was first employed in the manufacture of congreves and lucifers. For some time no ill effects were observed to arise out of the use of this combustible element; but gradually, as the demand for lucifers increased, and workmen were daily exposed for a longer period to the action of its fumes, a disease of a very peculiar nature manifested itself, and it soon became evident that that which Mr. Dickens has termed a real triumph of science, namely, the overturning of the old dynasty of the tinder-box, had been purchased at a great cost—the sacrifice of health.

The first paper directing attention to this subject was published in 1845, by F. W. Lorindser, who is chief surgeon of the district infirmary of Wieden in Vienna. Some of his cases are, however, dated as far back as the year 1839. In the same year, namely, in 1845, Dr. Heyfelder, of Nürnberg, assisted by Dr. Geist of the same place, also collected cases, and published a further report of the disease. Soon after this, M. Strohl, of Strasburg; Dupasquier, of Lyons; Helft, of Berlin; and Roussel, of Paris, took up the inquiry. More recently Drs. Von Bibra and Geist, of Nürnberg; Dr. Taylor, of Nottingham; and Messrs. Stanley and Simon, of this city, have recorded their experience of this malady. The most complete memoir on the subject, however, is that published at Erlangen in 1847, by Drs. Von Bibra and Geist; and I may inform you, that their work has been carefully epitomised in the first volume of the *British and Foreign Medico-Chirurgical Review* for 1848.

SYMPTOMS AND PROGRESS OF THE MALADY.

In this hospital you will have frequent opportunities of watching the course of the disease; and on inquiry, you will find that the phosphoric poison manifests its effects to the greatest extent, and at the earliest period, among those who are occupied in the processes of dipping, drying, and packing the matches,—these being the operations in which the workmen are most exposed to the action of the poisonous fumes. It is noticed, also, that the scrofulous, the cachectic, and the weakly are among the first to give way under the influence of the poison.

In order that you may form some idea concerning the nature of the agencies at work in producing the disease, I must tell you that the mixture used by the dippers consists of phosphorus, chlorate of potash, glue, gum, or resin, and some colouring agent, as smalt, Prussian blue, red lead, or ruddle. This mixture is kept warm on a hot iron plate, and when it is used it is spread out on a slab, so as to get a layer of uniform thickness prior to the dipping of the matches. During the whole of these operations a large quantity of white acid fumes are evolved; and, as the mixture, as well as the matches, often takes fire, the workmen are also exposed to the influence of a large amount of phosphorus and phosphoric acids, both of which are inhaled in considerable quantity. The drying of the matches is effected in a warm room, and here again the evolution of vapour is very considerable. Independent, however, of the immediate effects produced by the inhalation of the poison, there is a constant action, perhaps of a more dangerous character, going on over the whole surface of the body. This arises from the contact of the skin with clothes absolutely saturated with phosphoric vapour. "So completely," says Dr. Taylor, "are the garments impregnated with phosphorus, that, at night in a dark room, they are phosphorescent;" and a reviewer in the *British and Foreign*, before alluded to, states, that whilst he was carrying out his personal inquiries into the nature and symptoms of the disease, a young man presented himself for examination, who was labouring under the effects of the fumes. And although he had not been engaged in the manufacture of lucifers for eighteen months, yet he smelt so strongly of phosphorus that he impregnated the atmosphere of the room; and the writer was able to perceive the smell of phosphorus in his own coat two hours later, after a walk of a mile and a half.

In some instances, the effects produced by the concentrated fumes are immediate,—they irritate the eyes, cause pain and discomfort in the bronchial membrane, and produce gastric disturbance. More frequently, however, they fail to produce these effects, and, from the circumstance that the vapours are of a stimulating character, they often relieve the sufferings of those who are affected with chronic catarrh. Hence it is that there is a prejudice in some factories concerning the healthfulness of the occupation; and it is not until the workmen have been engaged for some months, or even years, in the trade that they begin to perceive the dangerous nature of their calling. Among the first symptoms which present themselves are griping pains in the abdomen, followed by repeated attacks of diarrhœa. Such attacks are by no means unfrequent; they are, however, attributed to weakness, and many leave the occupation, believing that they are not fitted for it. Gradually the sufferer loses flesh; he looks sallow, and after a longer or shorter interval begins to complain of toothache. On examination, the gums are found to be red and swollen; the teeth carious; and though the face may swell, and the pain be very considerable, yet the whole source of mischief is set down to the rotten teeth. This delusion is kept up chiefly by the fact, that the pain often intermits and leaves intervals of comparative ease. By-and-by, however, it returns with increased severity; the intervals of intermission become shorter and shorter, and at last the duration of pain is permanent. From this period the swelling of the face grows larger, it extends to the neighbouring glands; the gums, spongy and red, retire from the teeth, and give exit at the openings thus formed to a most offensive smelling pus: one or more abscesses form over the jaw; they break; and at every opening the same kind of unpleasant smelling matter is discharged, sinuses are established; the livid gums retire more and more from the teeth, which loosen and drop out; the jaw becomes exposed, and, on probing it, it is found to be rough and diseased: portions of bone exfoliate; and at this point the disease sometimes becomes arrested, and the patient recovers; more frequently, however, the entire jaw becomes involved in the mischief and dies. Such a condition of things cannot be expected to go on without producing its effects on the general system; the patent, in fact, becomes irritable; his nervous system is often highly excitable; his strength gives way; he loses flesh, becomes the subject of diarrhœa, then of low fever, and, after lingering for a longer time than you would think possible, he is at length worn out and dies. This result, however, does not always occur, not even when very large portions of the jaw have exfoliated. In a case recorded by Dr. Taylor, of Nottingham, the whole of the anterior part of the superior maxillary bones came away, and yet the man recovered. The piece of bone which exfoliated measured 2½ inches in length, and one inch in depth; it consisted of the bodies of the upper jaw bones, with the

cavities for the four incisors, the two canines, and four bicuspides. And, in Mr. Stanley's case, the whole of the lower jaw came away, first one half of it, and then the other; the place being supplied by a dense fibrous structure, which not only prevented deformity, but to a great extent supplied the purposes of the old jaw.

With regard to the period at which the symptoms of this disease manifest themselves, there does not appear to be any constancy. In the case of Brewerton, reported by Dr. Taylor and Mr. Simon, the man had worked at match-making for twelve years before he complained of any pain in the teeth or jaw; and, in another case of Dr. Taylor's, the patient had been occupied for six years as a dipper in the factory. In one of Dr. Geist's cases, that of a female aged twenty-two, the woman remained in perfect health during the first three and a half years of her time; and, in Mr. Stanley's case, the man Beckingham was employed for two years and a half before he suffered any great inconvenience from the inhalation of the phosphoric fumes. There is, however, a singular instance recorded by Pluskal, in which a very slight exposure to the fumes produced the disease; it is that of a little girl, aged seven years, who was accustomed to amuse herself at night by watching the luminosity of the matches in a dark room. The girl was of scrofulous habit, and after a time a red swelling appeared on her chin; this gradually ulcerated, and then discharged a fetid pus. The gums became diseased, the teeth loosened, and, in the course of a week, the soft parts were destroyed down to the bone. Ten days later, some small pieces of bone exfoliated, after which the patient gradually got well.

Again, with respect to the duration of the disease, the period is most uncertain. In some instances it runs its course in a few weeks, and in others it harasses the patient for years.

There appears, also, to be a difference in the progress of the malady, according to whether the upper jaw or the lower is affected. In the former case, the surface of the jaw becomes rough and porous, it acquires a dingy, blackish colour, and the cancelli are seen to be filled with ichorous matter, the discharged pus being gritty from the presence of small bony particles. In the latter case, however, the jaw becomes invested with a new bony growth, which is laminated in structure, and increased in thickness, from above downwards.

An examination of the cases which have been recorded seem to indicate that the lower jaw is more often the seat of this disease than the upper is; for, of the twenty-two cases mentioned in Dr. Lorinser's account, nine were affected in the upper, twelve in the lower, and one in both jaws; of the fifteen Nürnberg cases referred to by Drs. Von Bibra and Geist, five were in the upper, nine in the lower, and one in both; of Dr. Neuman's eight cases, three were in the upper, four in the lower, and one in both; and of the ten other cases which I have found recorded, five were in the upper, two in the lower, two in both, and one is not specified; so that of the fifty-five cases here referred to twenty-seven were attacked in the lower jaw, and only twenty-two in the upper, while five of them were affected in both jaws.

Post-mortem Appearances.—In those cases which were examined by Dr. Geist, there was great emaciation of the body; the soft parts in the neighbourhood of the disease were sloughy, their definitions were lost, and they appeared to be more or less dissolved in the grumous fluid which everywhere penetrated them. The lungs, both of men and animals, were hepatised and studded with tubercles, the other viscera were anæmic and flabby, and the blood contained in the large vessels was black and uncoagulated. On the lower jaw, as I have said, bony deposits are found, and these are seen either to be accumulated in masses, or else to be extended over the whole surface of the dead bone. This deposit has never any connexion with the jaw; it has a dingy grey colour, is spongy in its texture, and looks like a piece of wet pumice-stone. Von Bibra has made a careful inquiry into the physical structure and chemical composition of this morbid deposit; he finds that it consists of layers, which are distinctly seen resting upon one another: the Haversian canals are rather larger than those of normal bone; they are empty, except where the deposit is smooth, compact, and covered with periosteum; they do not run, as is usual, parallel to the general direction of the bone, but pass off at right angles to the surface, where they terminate in open mouths. The bone-corpuscles are rounded off or angular, and their contour is not well defined. The chemical composition of the deposit varies very considerably; for example, the proportion of organic matter in it ranges from 27·42 per cent. to 48·78, and the inorganic from 51·22 to 72·58. The average, however, of these constituents, in eight specimens, was, of the former 38·2 per cent., and of the latter 61·8. In the old necrosed bone, Von Bibra found that the organic matter averaged about 32·4 per cent., and the inorganic about 67·6.; from which it is evident, that the new deposit contains a greater proportion of organic material than the old, and the old, too, contains a little more than normal; for, according to the analyses of Von Bibra, the healthy adult bone contains from 30 to 31 per cent. of organic base, and from 69 to 70 of inorganic. This increase in the proportion of cartilaginous matter, due, in all probability, to the loss of earthy particles, is not, however, peculiar to this disease, but is quite common to all forms of carious or necrosed bone; and it is, moreover, a very usual thing to find an excess of the organic element in all osteophytic incrustations.

Pathology of the Disease. — On witnessing the terrible effects which I have just described to you, you would naturally seek to know something of the agent which produced them; you might even be tempted to go further, and to ask concerning the manner in which it operates on the body, so as to occasion such dreadful results. Both of these are very important points for consideration; but I regret that I cannot give you any satisfactory information upon either of them. Toxicologists are not yet agreed as to which of the many compounds formed during the slow combustion of phosphorus is the most powerful in its action; they know not which is the true *corpus delicti;* and pathologists are equally disagreed concerning the manner in which the toxic agent, be it what it may, operates on the system. Dr. Jungken even ventures to assert, that the malady does not arise out of the action of any poison whatever, but that the disease is merely an acute form of rheumatism, brought on by constant exposure to cold. The business of lucifer making is, he says, a very light one; and, consequently, it enlists the services of the scrofulous, the rheumatic, and the weakly. The factories are kept warm, in order to dry the matches; and they are also frequently ventilated, in order to blow off the irritating fumes which are so constantly generated. These currents of cold air excite repeated attacks of rheumatism; and, ultimately, the jaw becomes affected, simply because the periosteum of it is prone to inflammation from the presence of decayed teeth. A very little reflection, however, will, I think, convince you that this mode of accounting for the disease is a very imperfect one; for not only are there, among those who are affected with the malady, cases in which there is a total absence of all rheumatic symptoms; but the disease is never met with among other classes of persons who are equally exposed to such vicissitudes of temperature; moreover, it has been found that a more perfect system of ventilation—the living, in fact, in an atmosphere of cold currents—has tended to keep down the manifestations of the disease, while the adoption of an opposite system has made matters worse.

The discovery of arsenic in the phosphorus of commerce, and the employment of this metal, or its oxide, in many lucifer factories, has led Dupasquier to think that this poison is the cause of all the mischief. This author even states, that the disease did not present itself in the factories at Lyons, where arsenic was entirely excluded from the materials used. Dr. Geist, however, combats this statement, by saying, that arsenic is not used in some of the factories at Nürnberg, where the malady often occurs; and, secondly, that no such disease as the phosphorus disease is ever manifested among those who are otherwise exposed to the action of this metal. It is not seen, for example, among the smelters of arsenic, or among those who are occupied in the manufacture of arsenical pigments. In juxta position with this statement, however, I will take leave to place another one, made by Mr. Stanley, in his recent work on the diseases of bones:—"Many years ago, Dr. Roupell placed in the museum of St. Bartholomew's Hospital several bones from cows, obtained from Swansea, in the neighbourhood of which there are copper-works, where, in melting the copper ore, arsenical fumes are disengaged to such an extent as to destroy all animal and vegetable life within their influence. The animals, soon after their exposure to these fumes, become ill and disabled from disease in their bones, which, on examination, are found enlarged and covered by deposits of unhealthy osseous substance. Here, therefore, it would

appear, that, in animals, the arsenic, contaminating the circulating fluids, had, through these, excited inflammation of the periosteum and bones, of a somewhat similar character to the disease which occurs in the jaws of persons occupied in the manufacture of lucifer matches." Now, this is an important fact; for, though it does not throw much light on the disease in question, yet it indicates that arsenic is capable of producing in animals, if not in the human subject, an affection of the bones which is very similar to that occasioned by the fumes of phosphorus.

A consideration of all the facts connected with this subject leaves us no alternative but the belief that phosphorus, in some form or other, is the real cause of the mischief. I cannot tell you in what form it acts, for there are many compounds produced during the oxidation of this substance. Drs. Von Bibra and Geist are of opinion that it operates in the form of hypo-phosphorous acid; and I make no doubt but these authors have good grounds for their opinions; but still you have to remember, that many other volatile compounds of phosphorus are produced, many of which may, for aught we know to the contrary, be equally deleterious. In point of fact, the experiments of Hunefeld, Blake, Orfila, and others, have shown that phosphorous acid is a powerful poison; and it is highly probable that one or more compounds of phosphorus, with sulphur and hydrogen, are likewise generated during the process of dipping. Again, there is another compound produced during the oxidation of phosphorus; I allude to Schönbein's ozone, which may have something to do with the production of the jaw-disease. Until these matters are more fully investigated we cannot therefore venture to say by what agent the system becomes affected; nor can we positively explain the manner in which the morbific agent produces its effects. Dr. Lorindser, and, I believe, Mr. Stanley, are both of opinion, that the poison acts by becoming absorbed, and by infecting the blood. This condition of things might act by disturbing nutrition, especially of certain tissues, and thus, as Dr. Lorindser supposes, lay the primary foundation for a disease which only requires an exciting cause to bring it into action, and so determine the spot where it shall manifest itself. Drs. Geist and Von Bibra do not, however, entertain these views; but they are rather disposed to think that the jaw-disease arises out of the local application of an acid, irritating compound to the periosteum, which has been laid bare by a decayed tooth. This opinion is the popular one. It is adopted by Roussel, by Simon, and by Taylor; and I must say that there are many powerful arguments in favour of it. You will notice, for example, that though the workmen are employed in these factories for years, yet they never present any evidence of jaw-disease until one or more of the teeth begin to decay. The case of Rosine Meier, as instanced by Dr. Geist, is a marked proof in point. When she entered the Nürnberg factory she was distinguished for the beauty of her teeth, and she was engaged for some years in the business before the malady presented itself; it did so only after the wisdom teeth had become carious. This fact, namely the previous decay of the teeth, is so constant, that almost every observer has remarked it, and many have regarded it as an indispensable condition for the manifestation of the jaw disease. It is highly probable, therefore, that the acid fumes do act on the exposed periosteum; and, by setting up a peculiar form of inflammatory action, lead to the effusion of morbid products, and ultimately to the death of the bone. The experiments made on animals by Von Bibra are strongly confirmatory of this; and so are the observations of Dr. Helft, of Berlin, and of Professor Ryler, of Constantinople, both of whom have shown that other stimuli applied to the mouth will often produce a somewhat similar disease. For my part I am disposed to think that the phosphoric fumes act in two ways,—that they not only irritate the exposed periosteum, and so produce the jaw disease, but that they also gain access to the circulation, and produce, as Dr. Lorindser believes, effects of a more general character. This appears to me to be evidenced by the sallow look, the gastric and intestinal derangement, the wasting of the body, the irritability of the nervous system, the presence of phosphates in undue proportion in the urine, the cutaneous eruptions, and the falling off of the hair, as observed by Von Bibra, in animals; to which I may add, the black and fluid condition of the blood, and the constant occurrence of tubercles in the lungs. The experiments made by Von Bibra are, in my opinion, particularly valuable as a means of elucidating these points. He introduced rabbits into wooden boxes, three feet by three, with a wooden rail in front, of just sufficient width to prevent the rabbits escaping. He divided the experiments into two series, which he terms chronic and acute. The temperature of the room in which these animals were kept never exceeded 65° Farenheit; and, at the back of the cage, there was a Hessian crucible, in which a piece of phosphorus of twenty-five or twenty-eight grains was placed. This was changed once a week, during which period about half of it had volatilized. In the experiments which he has termed the acute series, two-thirds of the rails were covered up so as to prevent the free escape of the fumes; but this measure was omitted in the chronic series. When the fumes were very dense, they produced inflammation of the tissue of the lungs, and when less concentrated they occasioned bronchitis. They also entered the stomach, and caused gastric disturbance; but in none of these experiments did the bones appear to be in the slightest degree affected. It is singular, that in those animals which resisted the influence of the vapour longest,—that is to say, in those which survived from twenty-five to thirty days, instead of succumbing in from eight to twelve days, when exposed to the more intense action of the fumes, an eruption showed itself on the abdomen, in the axillæ, and on the genitals. The rabbits, although they continued to feed well, became much emaciated; the hairs fell out, and the parts were covered with a thick crust, and continually exuded a watery fluid. Dr. Von Bibra's attention having been directed by Professor Dietz to the necessity of an exposure of the bone, as a condition to the production of the bony deposit, he attempted to extract the teeth of rabbits; but these attempts either failed entirely, or the extraction was accompanied by a fracture of the maxilla. After repeated failures two of these rabbits were exposed to the phosphoric fumes, on the chronic system. The inferior maxilla of the rabbit was broken on the right side between the first and second molars, in such a manner that, as the subsequent *post-mortem* showed, the root of the first molar was exposed; and, by futile attempts at extraction, the third molar was broken off on a level with the alveolar process. The first and second molars of the other rabbit were extracted; but at the same time the maxilla was fractured at the corresponding spot. During the first few days both animals showed signs of depression, but they shortly recovered their spirits; and even from the beginning of their imprisonment they gnawed the turnips that were placed before them. After a time a considerable swelling formed at the injured part and the animals died, after having been caged for a little more than eight weeks. On opening their bodies the usual appearances were observed; the venous system was congested, the lungs were hepatized, and studded with tubercular deposits. The soft parts around the fractured jaw were in a suppurating state; the periosteum was inflamed, easily separable from the bone, and underneath it there was a deposit of a new formation, which Von Bibra believes was identical with the peculiar bony deposit observed in the lucifer disease. These experiments clearly indicate that the fumes of phosphorus are capable of producing constitutional as well as local effects.

PROPHYLACTICS.

A knowledge of these effects has led to the employment of several precautionary measures; among which the following are the most important:—

(a) *Cleanliness* in the management of the work, and frequent ablution in a slightly alkaline liquid. It is advisable also to throw off the working dress before quitting the factory.

(b) *Good Ventilation.*—Drs. Von Bibra and Geist rely much on this, and so does the reviewer to whom I have referred. In fact, the latter says, that in a lucifer factory in Finsbury, where the rooms are kept well ventilated, there are fifteen girls and fifty boys employed, and yet, though some of the workmen have been engaged there for eight or ten years, no case of the disease has occurred among them. The ventilation had been effected by the introduction of numerous large shafts, so that it was constant and effective.

(c) *The use of a hood*, the nozzle of which communicates with the exterior of the building, has been recommended by Dr. Taylor, of Nottingham.

(d) *The employment of Volatile Carbo-hydrogens*, which act, as I believe, by appropriating oxygen, and also by forming compounds with the evolved phosphorus, which is not prone

to oxidation. I shall refer to the rationale of these actions in my next lecture; but you will here see, that a very small quantity of turpentine diffused through the atmosphere will put a stop to the luminosity of phosphorus; and you will notice, moreover, that while the ordinary vapours from this solid act very readily on starch and iodide of potassium, and bleach litmus paper, they cease to do so when they are mixed with turpentine. I have elsewhere directed attention to this fact, and recommended the use of turpentine in those rooms where the phosphoric vapours are evolved in great abundance.

TESTS FOR THE RECOGNITION OF THE VAPOURS.

The most delicate test is a solution of nitrate of silver dropped on a strip of white paper. If ever so small a trace of a phosphoric compound be about, the silver spot will acquire a dark colour. Another test for these fumes is a mixture of boiled starch and iodide of potassium, which, put on paper, and held in the vapour, acquires a deep blue colour. And, lastly, there is a third test for the poison, founded on its property of bleaching litmus paper; but this test is not a very delicate one.

ORIGINAL COMMUNICATIONS.

DIAGNOSIS AND TREATMENT OF PULMONARY CONSUMPTION.

By Dr. JOHN HUTCHINSON,

Assistant-Physician to the Hospital for Consumption and Diseases of the Chest.

[Continued from p. 142.]

No. II.

OF THE SECOND SYMPTOM OF PULMONARY CONSUMPTION.

2. *Diminished Thoracic Mobility and Altered Conformation.*—The second striking feature presented in pulmonary consumption is alteration of thoracic form, and change in the respiratory movements. The back becomes rounded and stooping, and gradually the points of the shoulders are directed *forwards* and *inwards*, the apex of the chest is, if we may be allowed so to say, curled in upon itself: this shrinking in, and particularly the stoop, together with the direction of the tips of the shoulders, are striking symptoms of pulmonary consumption. It is worthy of remark, that nothing can be gathered from the expression of the face: one man may present a badly formed chest, be wretchedly emaciated, have a shocking expression, and yet give very little evidence of organic disease in the lungs,—at least not enough to account for his expression; and another may keep at his work as a *labourer* or *porter*, with a healthy expression of countenance, and have an extensive cavity in his lungs. The amount of organic lesion is not accompanied with a corresponding "*ill look*;" indeed it is wonderful sometimes to notice the exceedingly healthy expression in a patient with a wretched state of pulmonary disorganization. But, to return to our subject: the difference between the healthy-formed chest, the respiratory movements, and the phthisical-formed chest, with its pinched-in breathing movements, is exceedingly great. A healthily formed chest, in its most striking character, is ERECT, having the shoulders thrown well back; indeed their tips point almost backwards, and the anterior part of the chest is round and full: in the female this is still more striking, by reason of the mammæ increasing the anterior rotundity, and thus relatively giving the shoulders the appearance of being thrown more backwards. Upon a deep inspiration being made, the apex of the chest swells up; this motion is a fine undulation from below upwards,—a bulging outwards of the three or four superior ribs,—the shoulders, at the same time, being slowly, gradually, and moderately elevated; the apex of the lung feels to be "*tensely inflated.*" This rich movement is more striking in the female, where the costal movement is more extensive, and their lungs seem to revel in the abundance of air rushing into every air-cell. This movement, when once noticed and felt, cannot well be forgotten, and never mistaken. (See Respiratory Movements, "Cyclopædia of Anatomy and Physiology," Art. Thorax, p. 1079.) The circumference of the chest, from perfect expiration to that of the greatest inspiration, will be found to increase three or three and a-half inches, as can be determined by the common tape measure.

In the phthisical chest, these conditions are *quite changed;* every circumstance already noticed is strikingly reversed. The chest is *not* erect, but stooping; and it is manifest that this is not the stoop of vocation, as in the sedentary artisan: the erect and well-trained Life Guardsman will show it, though still he holds his head erect; it is more the stooping of age, the thoracic apex shrinking in upon itself; the shoulders are not inclined backwards,—the individual cannot direct them backwards,—but they tend to point forwards and inwards; the anterior part of the chest is not round and full, but flat; upon a deep inspiration being made, there is no fine undulating bulging,—no filling up of the apex; we feel that the lungs cannot be inflated; the movement is very limited, not gradual, but quick, and apparently made with great effort. It may be "*lumpish*" in its character, (See Pathological Respiratory Movements, "Cyclopædia of Anatomy and Physiology," Art. Thorax, p. 1083,) and restricted in extent; so that, in testing as before with the tape measure, the circumference of the chest is found not to have increased above one, one and a-half, or at the most two inches.

These movements are best examined from behind, looking over the shoulders downwards on to the anterior part of the thorax. The hands are the best instruments wherewith to measure them, for we thus inexpressibly feel the ruined condition of the once healthy capability of inflation. We should place the patient on a chair, stand behind him, and grasp the shoulder with the two hands, the thumbs being over the scapula, and the rest of the fingers over the clavicle, extending downwards over the anterior part of the chest as far as possible. If we now request the patient to "draw in" his breath, we can correctly measure the thoracic "swell," the "filling up," and estimate its character as good or bad by the amount of abduction of the fingers from the thumbs. This may also be done in front of the patient. In time the eye can appreciate at a glance, and with simply one hand on the chest, and, by the *fraction* of a movement, whether the respiratory movements are of a healthy character or not. We should first endeavour to become familiar with the healthy movement, and the pathological will be learned at the same time. If there is not this pathological character which we have described, together with loss of weight, we shall find *no* other evidence of pulmonary consumption.

The breathing movement, or thoracic mobility, is constant in degree, obedient to a certain limit, according to the height of the individual, and not according to the bulk of the chest; the mobility increases with the height, and *vice versâ*. We have already introduced to the notice of the profession, a simple instrument (the Spirometer) for expressing this thoracic mobility in figures, by the means of measuring the volume of air expired in cubic inches; for, as a man cannot breathe without moving, the volume of air displaced into the spirometer must be exactly commensurate with the extent of movement of all the thoracic boundaries. In this way the spirometer has become a test of the second symptom of phthisis—the thoracic mobility. It was found in the Hospital for Consumption (before the author became attached to it), that out of 415 males taken indiscriminately, the volume of air which could be expired was only 129 cubic inches instead of 222, or that there was a deficiency of 42 per cent. (See "First Medical Report," 1849, p. 25.) Now, as 129 is not 222, so neither is the extent of breathing mobility of a phthisical patient the same as that of the healthy man. According to the degree of the pulmonary lesion this mobility is more or less changed, and thus the physicians who drew up that report found that, before tubercles softened the thoracic mobility or vital capacity was 168 instead of 236, and after softening 79 instead of 237 cubic inches.

A common question put to us is, "Where does the diseased difference begin?" or, in other words, what difference of mobility may exist between two men, and yet their lungs be healthy? We are disposed to consider that, when the thoracic mobility has diminished 16 per cent., and there is accompanying loss of weight, then such a case begins to

look suspicious; or, to express it in figures, we may take the following Table :—

Height.	Temperature, 60° Fahr. Vital Capacity in Health. or Volume of Air expired in cubic inches.	Vital Capacity deficient 16 per cent.
ft. in. ft. in.		
5 0 to 5 1	174	146
5 1 to 5 2	182	153
5 2 to 5 3	190	160
5 3 to 5 4	198	166
5 4 to 5 5	206	173
5 5 to 5 6	214	180
5 6 to 5 7	222	187
5 7 to 5 8	230	193
5 8 to 5 9	238	200
5 9 to 5 10	246	207
5 10 to 5 11	254	213
5 11 to 6 0	262	220

For instance, if we take a man of any height between 5ft. 7in. and 5ft. 8in., who should breathe 230 cubic inches, but instead of this he breathes only 193 cubic inches, our attention is arrested, and we then examine more minutely—first, as to his loss of weight, and then the character of his breathing movement, whether free, undulating, and swelling, or lumpish, massive, and limited. Sufficiently to answer this question we may say then, that 16 per cent. deficiency is the lowest limit of the healthy mobility or vital capacity.

Next to the limited breathing movement may follow non-symmetrical movements; but, according to our arrangement, stethoscopic signs appear before the breathing movements become non-symmetrical.

The ordinary breathing movements (in this second division of our subject) become more or less deranged, in time and order, with derangement of the pulse. The reader will bear in mind, that the "*ordinary breathing*" is quite distinct from the *forced and deep breathing* just described as the second symptom of pulmonary consumption. Ordinary breathing may be altered as to time and order, or as to being costal or abdominal; but, whatever be the change of the ordinary breathing, it may not be characteristic of any particular lung disease. The ordinary breathing is one of the most delicately sensitive functions in the body. Our breathing may be costal or abdominal for a year, a month, a week, an hour, a minute, and then change again; but the character of *deep* breathing once damaged, it *remains so*. Let the fine swelling movement be once changed into the phthisical, pinched, and limited movement, and it continues in this state. Derangements of the ordinary breathings are chiefly symptomatic of something wrong in the function of aëration; this "something" may be any other affection just as well as pulmonary consumption. A man may breathe costally from intense pain in his toe as well as from pain in his chest. The ordinary breathing movements, if we might be allowed a simile, are like so many strings which can be pulled in every possible combination to meet existing difficulties, to keep life in us, throughout all the diseases and all the casualties we may experience during the whole term of our life. If one combination will not do, another must. Respiration may be performed by the upper ribs or the lower ribs, or the middle ribs, or the diaphragm. Indeed this is wonderful to contemplate—for man to breathe through three score years and ten, by only these few movements, which are capable of meeting every difficulty that presents itself, from any disease or physical injury which may befall the respiratory organs or the thoracic boundaries.

The number of respirations and pulsations is, for the most part increased in pulmonary consumption. We found the healthy respirations in 1407 males to range from 16 to 24, and 20 was the prevailing number; and the pulse ranged from 64 to 88, while 80 was the prevailing number; or there were 4 pulsations to 1 respiration. In 496 cases of phthisis, male and female, the prevailing number was 28 respirations per minute; next 24; then 32; and lastly 20. There were 26 cases of 40, and 1 of 60 per minute. In 577 cases of phthisical males and females, the prevailing number of the pulse was 100; next 120; and lastly 80 per minute; or 463 cases had a pulse between 80 and 120; therefore, the proportion of respirations to the pulse in these cases was, on an average, 28 to 100, while the average in the healthy cases was, 20 to 80.

The character of ordinary breathing in 298 male phthisical cases was 90 costal, 100 abdominal, and 108 both costal and abdominal; therefore, nearly 2 out of 3 had deranged "ordinary breathing" movements.

Derangements in character, like those last mentioned, are not so early symptoms of pulmonary consumption as derangements in *time*, like those first mentioned. The cause of the need for more or less air in the lungs, bears no strict relation to the manner of thoracic movement to supply that need.

The combination, however, of quickened respiration, diminished thoracic mobility, altered form of the chest, together with loss of weight, are STRONG symptoms of pulmonary consumption.

Milton-street, Dorset-square, August, 1850.

[To be continued.]

THE CHOLERA IN PLYMOUTH AND ITS NEIGHBOURHOOD IN 1849.

By Dr. EDWARD T. ROE,
Plymouth.

[Continued from p. 117.]

Much has been written upon cholera, and yet no manifest benefit has hitherto resulted, except to show us how little we know of the disease; but had the same amount of talent and industry been applied to close clinical observation, and strict inductive reasoning, as has been spent in forming and supporting idle theories, a valuable mass of information would have been obtained, which might have admitted us to a more intimate knowledge of the means of opposing that most fearful scourge of modern times than we yet possess.

Not only has the essential nature of cholera called forth much disputation, but even the symptoms which are indispensable to constitute a case of that disease have been warmly debated; it behoves, therefore, every writer on the subject to define clearly what he means when using the words "cholera" and "choleraic diarrhœa." In these papers I refer only to the Asiatic form of the epidemic, and I confine the term "cholera" strictly to cases of vomiting and purging of a fluid resembling rice-water in appearance, accompanied more or less by cramps, total suspension of the salivary, biliary, and urinary secretions, urgent thirst, coldness of the body, and rapid sinking of all the powers of life, ending, for the most part, in less than forty-eight hours, in death, recovery, or consecutive fever.

The term, "choleraic diarrhœa," is restricted to those cases which differ essentially from ordinary diarrhœa in presenting rice-water excretions.

I now proceed to the consideration of the cholera as it appeared in the neighbourhood of Plymouth in 1849; I shall then pass on to trace the disease through some of its important phases in the town; and, lastly, give a brief sketch of the most interesting cases that fell under my observation and their treatment.

Having in a former paper stated my own opinions, I now act simply as a narrator, and give the facts as they have come to my knowledge, without considering whether they are for or against any particular or preconceived theory. With this object, I have obtained all the information I could conveniently collect; and the only communications rejected are those where vague generalities have been indulged in, to the exclusion of definite statements. The only merit I claim, or care to have awarded me, is that of impartiality; for, if any errors be found in these papers, they are the result of almost unavoidable accident, from having to collect from many sources, and not of undue haste, inadvertence on my part, nor unfaithfulness. In all the leading points, care has been taken to guard against the shadow of a mis-statement; and, even at the risk of incurring the charge of abruptness in style and tediousness in detail, names and dates are frequently given for the purpose of subsequent verification, should it be required.

Apologising to my readers for thus bringing myself so prominently before them, I may be permitted, in conclusion, to remark, that I do not offer this *brochure* to their notice as perfectly exhausting the subject; but, if it leads others to come forward and complete what I have begun, my object will be fully accomplished.

Without further preface, I will at once proceed to consider the cholera as it first appeared in the neighbourhood of Plymouth.

About nine miles from that town, is a fishing village, con-

sisting of a double tier of houses built round a creek, somewhat in the shape of an elongated horse-shoe; these houses are backed by hills, which rise from the water's edge to a considerable height on three sides. In front of the houses, at low water, is a mass of muddy putrefaction, which may then be crossed, on stones placed for that purpose, with about the same amount of inconvenience as would be experienced by passing through a piggery. Pilot vessels and boats lie scattered around, but the one prevailing feature of the landscape, at this time of tide, is mud. The hills, picturesquely clothed with wood, shut out the winds; and the smoke, languidly rising from the lower tier of houses to the upper, hangs like a mantle over the habitations in the stagnant air. When the tide is in, a different character is given to the place; and then, viewed from the heights in front, a picture of surpassing loveliness presents itself. The deeply embayed cottages, nestled against the rising hills, and washed by the gently rippling waves; the stately firs above, and the yacht-like boats riding gracefully below, give an aspect of exquisite beauty to the scene; the simple, humble village church placed in the very centre, as of all the holiest—most cherished, casts an air of calm sublimity around; and yet there is a stillness in that deep gorge which seems unnatural; the wind whistles on the hills, but not a leaf stirs there; and the thought forces itself upon the mind, that in that luxuriant foliage and those lowly dwellings danger lurks. No place could be conceived better adapted for the retention and germination of a poison once introduced into it, than the locality described: that place is Noss, and there the cholera began.

It is situated two miles from the sea, and is out of the way of all ordinary traffic and communication: it has always been dirty and offensive, but no case of cholera occurred there during the former epidemic. The village consists of nearly ninety houses, and contains about 340 souls; the men and boys are almost exclusively occupied in fishing, and all are fed, for the most part, on fish and potatoes.

Smacks from Dieppe, trading for crabs, visit the estuary every fortnight, and report states that occasionally vessels from the Channel Islands bring tobacco and spirits, which are landed, if possible, without payment of the duty; but, since the establishment of a preventive-station there, very little traffic in that way has been carried on.

The first case of cholera occurred on May 11th, in a fisherman named Foster, who, with his partner, had been the same morning on board the Dieppe smack Jean Emile, and had drunk some brandy-and-water there.

The cholera was very fatal at the French port when the vessel left, but no case of the disease had appeared among the crew.

Foster had been ill with diarrhœa for two days, as it was supposed, from eating freely of a shell-fish called queens or quins, (*pecten opercularis;*) but he had pursued his usual avocations, and was better on the morning of the 11th; on his return from the smack he had a cup of cider, and in the evening was seized with all the symptoms of cholera; he died on the 17th, and was not buried till the 20th. On the 15th, his partner, a man called Reeves, was seized with choleraic diarrhœa, but, after a very severe attack, recovered. On the 18th, Foster's niece, a child seven years of age, who lived with him, was attacked with cholera, and died the following evening. Both Foster and his niece were allowed to be interred in Newton churchyard, as it was supposed that they had died of English cholera.

Reeves's children were the next attacked, and one aged six died on May 25th, after twenty-four hours' illness.

Foster lived at the right hand extremity or heel of the horse-shoe; Reeves's house was sixty yards up a lane, in the centre of the village leading to the hills.

No further case occurred until the 4th of June, when, like a spark that some time lies smouldering, and suddenly bursts forth into ungovernable flame, so was it with the cholera at Noss. It had for nine days apparently been germinating in the bodies of the inhabitants, and at length broke out with desolating fury. At first it could with difficulty kill; the sailors in robust health it could not even touch; the man previously exhausted and prepared for its reception it took six days to destroy; the tender child soon fell; the life of the full-grown healthy man it assailed in vain, and again a child was swept away. While this was going on, nothing was done to prevent the spread of the disease; the time for purification was allowed to pass; the dead remained for days unburied, and the mourners received the condolences of their friends in the lazar-house. The result it required no divining-rod to foretell; the poison might, like that of hydrophobia, be erratic in its stage of incubation—it might, like that of influenza, of typhus, and of hooping cough, have its idiosyncrasy and selection of victims; but with the dissemination it had received, and the hot-bed it was planted in, it was sure to find wherewithal to feed on; and so it proved.

On the 4th of June many were simultaneously attacked; and on the following night a man called Jackson set off to Plymouth for Dr. Yonge, to see his wife, who had been seized with the epidemic a few hours previously; she died before he reached that town, and he was attacked with the same disease while in the Doctor's house. He was sent to the South Devon Hospital, and died there the same day. This was the first case of cholera in Plymouth. His body was conveyed back to Noss, where a sad change had taken place; already many were the dying and the dead, and still on sped the pestilence; death soon was in almost every family, and none could fly without leaving some they loved to die untended and alone. Days passed, but the disease was still there; and coffins now were brought in carts instead of being carried by hand; fearful was the amount of misery and gloom contained within that narrow space, and yet never, perhaps, did Noss look more beautiful, than on some of those hot nights when the tide was in and the moon was high. At such a time to see the lights twinkling and glimmering in each lattice window, but never the live-long night going out, as though all was revelry and joy within, when, alas! they but revealed scenes of the deepest pain and woe, seemed in strange contradiction with Nature, and made her beauty like a mockery, and her quietude appear unkind. All around said peace, when there was no peace, for the cup of this world's affliction was being drained to the very dregs, and He who alone had power to save appeared to have withdrawn his presence, for the elements were hushed and still—they refused their sympathy and denied their aid; no rain fell to cool the earth and wash away the pestilence; above was a sky of brass—below, a reeking stench; not a cloud was to be seen, nor a cooling breeze to be felt, and what little air there was came from the north-west, which only wafted the disease back upon the sufferers, or, when it shifted to the east, increased its virulence. Beforetime, the merry carol of the returning fisherman might be often heard breaking the stillness of the night; but now, except occasionally the shriek of some new sufferer was borne across the waters, or the hurried stroke of the boatman's oars, announcing another victim and summoning the assistance (a) that was too frequently of no avail, was heard, no sound smote on the ear—all was as silent as the grave. Such was Noss, and yet, not a hundred paces from it was a village, equalling it in population, where but one person died of cholera during the whole time of the prevalence of the epidemic.

On June 5th, a man called Hockaday, and his son, a lad fourteen years of age, left Noss to fish, and when five miles out at sea, no vessel being in sight, they both simultaneously became aware of a hot offensive stream of air passing over them. It was so decided, that the crab-pots were examined, to see if it came from them, but it did not; and five minutes after the father's attention was directed to the boy, who was vomiting and purging. He had been suffering from diarrhœa before he left Noss, and many said it was wrong to let him go into the boat, but he seemed better for doing so; before he reached home, however, he was in collapse, and the same evening died.

On the 6th a bottle was picked up in the estuary, containing a scrap of paper, with the following words: "Ship American Eagle. All the passengers have got the cholera, and a great many dead." She passed into Plymouth Sound on June 5, at four p.m. Hockaday reached his home between two and three o'clock on the same afternoon.

On the 19th of June the culminating point of the disease was reached; on that day seven died, and from the 20th to July 5th inclusive there were only nine deaths; the last was that of a nurse, who, after having passed through all the horrors of the place unscathed, at last fell a victim to her own imprudence. On July 3rd she insisted on having pork, potatoes, and greens for dinner, and immediately after became ill. She died on the 5th.

No further case occurred until the 31st of August, when a

(a) The medical men on duty at Noss had their head-quarters at Newton.

very fine girl, aged 11, was seized with cholera, and died in seven hours; this, if we except a man who was brought from Bridge-end, was the last death from the epidemic at Noss. Thirty-five persons died in fourteen days there, and fifty-one altogether, being about one in every six and a half of the population. The average age of those who died was 24.

To sum up the number of those who had one form or other of the epidemic would be to give a list of the inhabitants, for scarcely one individual escaped.

At Newton, which is opposite Noss, and on the north bank of the Yealm, there were many cases of cholera; but a person who had acted as nurse at Noss was the only individual who died of the epidemic; one death occurred from choleraic diarrhœa in an aged woman, who sank in seven days from exhaustion.

Newton is differently situated from Noss, in being exposed to the draught of the river, and not shut in by hills; many of the houses are built on high ground, but there is a similar mass of mud banks before them. The inhabitants very nearly equal those of Noss in number, and are chiefly employed in agricultural pursuits.

About a quarter of a mile from Newton the river ends in a small mill stream, which is crossed by a stone bridge. At this point a few houses are placed, some on the Newton, and others on the Noss side of the water, and the whole is called Bridge-end. It closely resembles Noss in being muddy and offensive; but no case of cholera occurred there until July 9th, when a labourer was seized with the disease while working in the fields, and died the following day; his child, aged 3 years, also died of the epidemic six days after. The man had been ill with diarrhœa for some time, but neglected himself, and refused to take medicine.

The next cases of cholera at Bridge-end are highly interesting, and occurred in September, at which time all traces of the disease had left Noss, and only one fatal case been under treatment there for more than nine weeks. On September 5, five persons were sent from the Newton side of Bridge-end to clean some fish in a house at Noss, where a very malignant case of cholera had taken place in the previous June; of these five, three died, the other two escaped all illness.

The first victim was a boy six years of age, called Bunker, who was attacked at twelve o'clock on the night of the 6th, and died in seventeen hours. Elizabeth Frost, aged 16, was the second seized, and died on the night of the 9th, after about twenty-eight hours' illness; and the third was Peter Kelland, twenty-five years old, who died on the 10th, at Noss, having been ill only sixteen hours.

There were no other fatal cases at Bridge-end. The house at Noss had been cleansed under the superintendence of a medical gentleman, with Sir W. Burnett's disinfecting fluid, immediately after the death occurred there in June, and had remained uninhabited until entered by the people from Bridge-end.

Yealmpton offers little to detain us, as there were only five fatal cases of cholera there; the first two persons attacked were a man and his wife, aged 72, who died, the one on the 24th, and the other on the 25th of June. A woman, named Lapthorn, residing at Yealm-bridge, a mile from Yealmpton, took their soiled clothes to her home to wash, and died on the 29th; her brother, James Sankey, living at Dunstone, was the next attacked; he died on July 3rd, and his was the first case in that hamlet. The second case, and which also proved fatal on the same day, occurred in a person who had been nursing a relative in an attack of cholera a few days before in Newton Torr. Nine died at Dunstone, out of a population of 137. Newton Torr and Boldventure, situated about a quarter of a mile below Yealmpton, and close to the river Yealm, had four fatal cases of cholera, uncharacterised by any prominent circumstance. At these two places the river is a mere fresh water stream; and it is, perhaps, worthy of remark, that a dense fog is frequently observed creeping up to them along its course, even when the wind appears to be in a contrary direction.

Brixton had only three fatal cases out of a population of upwards of 300 souls.

Since writing the above, a paper on the Cholera at Noss, &c., by Mr. M'Laren, has come into my hands. In it I find some statements at variance with mine, and which, therefore, require explanation; thus, the population is made by him to amount to 400, apparently on the Registrar-General's authority; while I state it to be only about 340 upon the following data. A week after the cholera broke out at Noss, the schoolmaster of that village, a very intelligent man, counted the inhabitants, and found they amounted to 321 souls. In that past week twenty had died, and as there are good and substantial reasons for believing that very few, if any, had fled the place in alarm, the population may be safely assumed at between 340 and 350.

It is erroneously stated by Mr. M'Laren, that the last fatal case of cholera occurred on July 3rd, and the last death July 5th. A girl died there on August 31st, and a man on September 10th. The amount of the mortality was 51, not 49; and this, with the population reduced to 340, makes the mortality nearly one in 6½, instead of one in 8.

Again, he is in error respecting Bridge-end. He states, that "two or three cases of severe cholera occurred in a miller's family, one of which proved fatal;" whereas two died there in July, and three in September.

[To be continued.]

THE EPIDEMIC OF 1849 ILLUSTRATED BY ST. GILES'S,

AND SUGGESTIVE OF THE GASEOUS ORIGIN OF CHOLERA.

By Dr. KING,

Superintendent-Surgeon of Bilston and Darlaston, in Staffordshire, in 1832, and Superintending Medical Inspector of Lambeth, Newington, Camberwell, St. Giles's, St. Martin's, and the Strand and Holborn Unions in 1849.

That cholera and diarrhœa are distinct diseases, caused by a gas generated at the homes of the sufferers, is the conclusion at which I have arrived, after a careful survey of all the phenomena attendant upon both visitations to this country; the poison in its gaseous form being localised in the blood by inhalation, and giving cholera; in its liquid form in the mucous membrane of the stomach and bowels, by the drinking water, and giving diarrhœa.

The one disease is more particularly characterised by asphyxia of a leaden blue or sooty black type, varying in shade with the intensity of the attack, by loss of voice and hearing, suppression of urine, quick respiration, restlessness and thirst, a cold damp skin, moist chilled tongue, and sharp and contracted features expressive of terror; rice-water purging, with or without vomiting, appearing as a forerunner of death, and not as a premonitory symptom;—the other, as its name implies, by diarrhœa, first of a bilious, then of a rice-water appearance, and by vomiting; but only on the approach of death presenting the cadaveric look so peculiar to cholera, and seldom imprinting the skin with the colour, and stamping the countenance with the terror of its more fatal companion. The one disease, for conciseness, may be said to commence, the other to end, with diarrhœa.

To illustrate these views I selected St. Giles's; and to aid me in my inquiry, the Registrar-General and the Board of Guardians of the parish favoured me with reference to their respective returns, and Captain Yolland, of the Ordnance Survey, with a copy of the Ordnance skeleton map. Thus ably assisted, I found, for the quarter ended September, 1849, that 267 persons had died of cholera, and 63 of diarrhœa.

Fixing the death to the house, Tables III. and IV.,(a) so as to read at a glance the mortality of the street, the way is paved to study Tables V., VI., and VII., which, in their results, are favourable to the theory of a local poison—a theory strengthened by that of Table VIII.,—assuming the increase in the mortality on Monday and Tuesday to arise from the inhabitants being more at home on the Sunday, and still further strengthened by the street survey, Table IX.

Here the mortality is found to fall in isolated groups,—a phenomenon, to my mind, unaccountable upon any other theory than that which I have ventured to advance; a theory strengthened by the fact, hitherto unexplained, that cholera occurs in some countries in the depth of winter, and in others in the height of summer,—a theory supported by chemical and meteorological science in their most advanced stages. For example, Cross-lane has mortality in two houses only, one being opposite to the other; New-street in three houses only, one being opposite to the other two; Parker-street, in four houses only, two being opposite to the other two.

(a) The smaller appended to the larger numbers denote the intensity of the mortality.

Where the mortality is confined to one side of the street, the disturbing cause to the law which I have suggested presents itself in the form of a wall, a shed, a church, an open ground, or the back of a large building, such as a brewhouse, or a line of untenated houses. King-street Seven Dials, Newton-street, Brownlow-street, Duke-street Lincoln's-inn-fields, and High-street, are the only exceptions out of twenty-nine streets which had mortality in more than one house. The first exception is met thus, while King-street has its N.E., Endell-street has its S.W. side attacked, therefore back each other. In addition, the back of King-street is exposed to a large space of open ground, upon which a portion of Endell-street once stood, and lying in the distance are Lascelles-court and Broad-street. An outbreak from this open ground would inevitably fall as it did upon King-street and Endell-street, and probably involve in one common destruction Lascelles-court and Broad-street.

Newton-street is a broad continuation of the narrow Cross-lane, the breadth of the street being a disturbing cause of some moment; and Nos. 11 and 18, Brownlow-street, were apparently not involved in the same destruction, for the three deaths at No. 11 occurred on the 19th and 20th of August, and the single death at No. 18 on the 9th of September. So with Nos. 1 and 44, Duke-street; and 10, High-street, evidently belongs to the group formed by 22 and 30 Broad-street.

The locality of cholera in St. Giles's in 1832 and 1849, which formed the subject of a paper published in the *Medical Times* of August 10, so far supports the gaseous theory, that, of the 26 streets in which the epidemic appeared in both years, in 23 the mortality was confined within an area comprised by eight houses—an area which does not necessarily involve an extended line, for four of the houses might have been found, upon investigation, to have been opposite to the other four; and I only regret that, at the time that paper was printed, I had not the means satisfactorily to determine the question.

Still further inquiry into the gaseous theory of cholera would have been at our command, if the hour and precise room of attack had been recorded, to the importance of which I was fully alive on the 16th of September, and altered my schedule for the purpose; but at that time the General Board of Health changed the districts of the several inspectors, by which means I resigned Lambeth, Newington, and Camberwell, for St. Giles's, St. Martin's, and the Strand and Holborn Unions; the cholera in my new districts having ceased, and my successor in my old districts preferred his own schedules, which he had used elsewhere, in which the hour and precise room of attack were not items of inquiry.

And far greater results would have grown out of the epidemics of 1832 and 1849, if the early symptoms of each case had been recorded; for those who contend for diarrhœa being a mild form of cholera, or premonitory of cholera, must admit that symptom to be as often absent as present in the early stage of the most fatal cases. In that light alone, it will be sound to consider diarrhœa and cholera as distinct diseases, until proved to the contrary, as the best diagnostic guide to the treatment, rather than to consider them two forms of one disease.

It is at once explained why one medical man should save and another lose 50 per cent. of their cases by using the same treatment, if diarrhœa and cholera are found to be as distinct from one another as I consider them. The success I met with at Darlaston, in 1832, was mainly due to my treating the epidemic of that period as simple diarrhœa until the appearance of collapse, and then as the collapse of diarrhœa if it had been preceded by diarrhœa; the physical signs of the collapse of diarrhœa and cholera being distinct.

Table I.

Of 4959 houses,(a) 167 *only furnished one or more cases of Cholera in the following proportions:—*

123	houses	1	case	= 123
22	,,	2	,,	= 44
15	,,	3	,,	= 45
5	,,	4	,,	= 20
1	,,	5	,,	= 5
1	,,	6	,,	= 6
		Unknown	...	16
		Workhouse	...	8
167				267

(a) There were in 1841, 4959 houses inhabited; 186 uninhabited; and 29 building; and the population was 54,292 persons, or 25,525 males and 28,767 females.

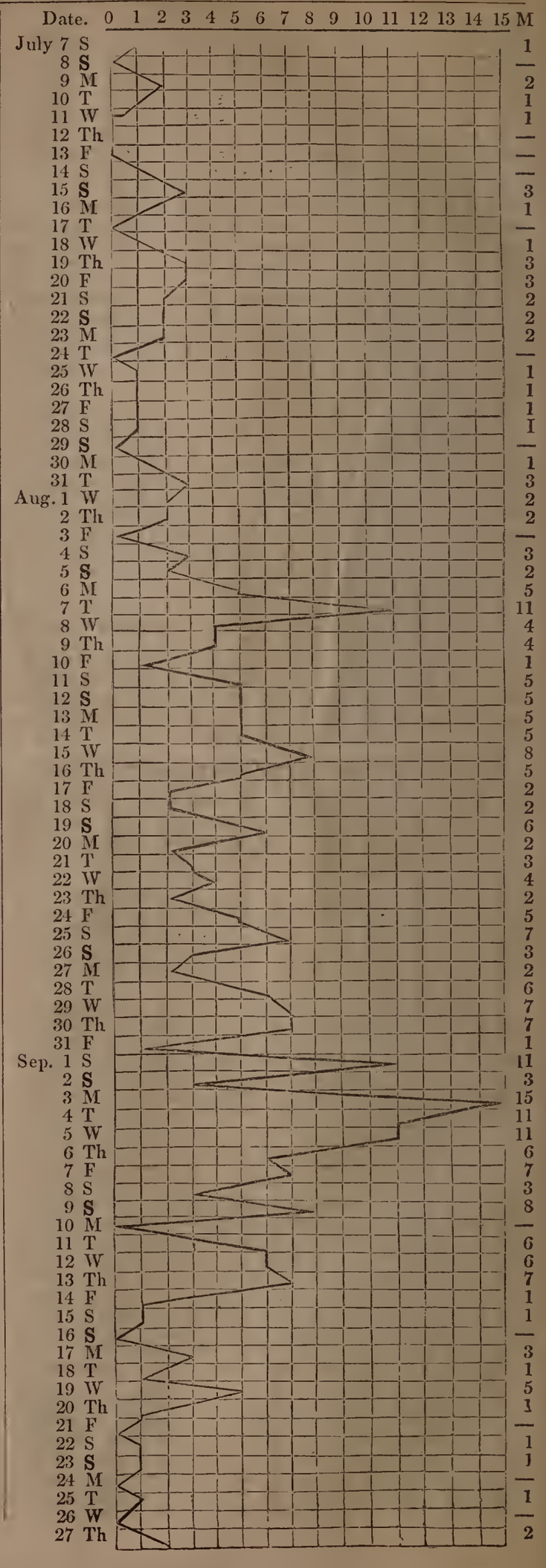


Table II.

Duration of Cholera.			Days.				
Under 6 Hours	2	5	6
6 to 12	39	7	7
12 ,, 18	29	2	8
18 ,, 24	50	2	9
24 ,, 36	28	2	11
36 ,, 48	29	1	13
3 days	15	31	14
4	14	32	Unknown.
5	9	267	Total.

Table III.

Mortality of Diarrhœa and Cholera in same Street.

M	Diarrhœa. House.	Street.	Cholera. House.	M
1	22	Church-lane	28, 275, 24, 22, 213, 202, 183, 17, 16, 15, 103, 84, 76, 6, 0, 12, 2, 33, 43	43
1	9	Cross-lane	7, 3	2
2	5, 24	Crown-street	24	1
3	1, 2, 4	Duke-st., Lincoln's-inn	44, 1	2
1	17	Endell-street	28, 172, 162, 15	6
1	24	George street	242, 15, 112, 7	6
2	5, 22	Great Earl-street	17, 14, 13, 113, 103	9
1	33	Great St. Andrew-st.	47, 42, 354, 7, 4	8
3	18, 34, 53	Great Wild-street	58, 47, 16	3
2	12, 26	High street	21, 10	2
1	2	Kennedy-court	5, 42, 33	6
3	15, 382	King-street, Seven Dials	36, 34, 29, 252, 23, 212, 16, 153, 142, 10, 3	10
1	5	Lascelles-court	142, 13, 11, 7, 5, 43	9
1	11	Lascelles-place	2	1
1	14	Little Coram-street	18	1
1	27	Little Earl-street	152	2
1	11	Little White Lion-st.	22	2
1	11	Little Wild-street	2	1
1	15	Lumbar-court	20	1
1	2	Newton-street	14, 9	2
1	20	Queen-st., Seven D.s.	26, 24, 202, 83	7
1	1	Star-court	9, 2, 1	3
1	2	Wild-court	5, 4, 3, 1	4
1	5	Wild-passage	22	2
33	32	24	87	139

Table IV.

Mortality of Diarrhœa and Cholera in different Streets.

M	Diarrhœa. House.	Street.	Street.	Cholera. House.	M
1	25	Bainbridge-street	Alfred-mews	7	1
1	28	Bedford-place	Broad street	47, 30, 223	5
1	Bapt. Chapel	Bloomsbury-street	Brownl-w-street	18, 113	4
1	16	Brunswick-mews	Carrier-street	11, 3	2
1	2	Burnett's-builds.	Charles-street	44, 42, 38, 36, 34, 32, 312, 13, 8, 1, 0	12
1	2	Chapel place	Church-street	11	1
1	7	Clark's buildings	Coal-yard	21	1
1	10	Denmark-street	Colonnade	11	1
1	72	Great Queen-street	Compton street	23	1
1	4	Gt. White Lion-st.	Crown-place	6	1
1	8	Henrietta-street	Dudley-street	85, 843, 65, 57, 36, 28, 192	10
1	10	Hunter-street	Dudley-court	14	1
1	25	Kingsgate-street	Drury-lane	185	1
1	3	Linney-court	Duke-st., Oxford-st.	27	1
1	13	Little Guildford-st	Guildford-street	61	1
1	35	Little Queen-street	Henrietta-mews	11	1
1	2	Marchmont-place	Holborn	255	1
1	3	New-court	Hyde-street	33	1
1	18	New Compton-st.	Kenton-street	44, 35, 12	3
1	8	Princes-street	King st., Drury-lane	33, 23, 122, 11	5
1	1	Smart's-buildings	Lawrence-lane	8	1
3	3, 9, 16	Stacy-street	Lloyd's court	43	3
1	7	Store street	Marchmont-street	58	1
1	13	Wilmot-street	Montague-place	24	1
4		Workhouse	Museum-street	58, 39, 5	3
			Neal's-yard	4	1
			New street	5, 42, 24	7
			Nottingham-court	10	1
			Parker-street	52, 514, 9, 8	7
			Phœnix-street	14, 42, 3, 2	5
			Queen-street	57	1
			Queen-place	4	1
			Red Lion-yard	2	1
			Regent's-place	7, 24	5
			Short's-gardens	112, 0	3
			Smith's-court	6	1
			Topin's-court	2	1
			Tower-street	282, 243, 22, 4	7
			Unknown		16
			Workhouse		8
30	26	24	38	78	128

Table V.

Mortality according to Sex and Age.

Difference against locality. Total.	M. over 60	M. under 10.	F.	Diarrhœa. Tot.	F.	M.	Age.	Cholera. M.	F.	Tot.	Difference against locality. F.	M. under 10	M. over 60.	Total.
				31	16	15	0 to 1	6	7	13				
				9	3	6	1 ,, 5	15	16	31				
				5	2	3	5 ,, 10	11	13	24				
				0	0	0	10 ,, 20	13	14	27				
				3	2	1	20 ,, 30	10	29	40				
				2	1	1	30 ,, 40	19	32	51				
				3	2	1	40 ,, 50	10	20	30				
				5	4	1	50 ,, 60	15	12	27				
				2	1	1	60 ,, 70	5	14	19				
				3	1	2	70 ,, 80	2	3	5				
				0	0	0	80 ,, 90	0	0	0				
				0	0	0	90 ,, 100	1	0	1				
28	3	24	1	63	32	31	Total	107	160	267	32	23	8	92

Table VI.

Mortality according to Family order.

Diarrhœa.		Cholera.
7	Men.	62
5	Wives.	57
24	Sons.	44
20	Daughters.	44
7	Widows and Spinsters.	47
0	Maidservants.	12
0	Menservants.	1
63	Total.	267

Table VII.

Mortality according to Employment.

Cholera.

Men.				Widows and Spinsters.			
Labourers	26	Pavior	1	Charwomen	17	Dress makers	2
Porters	5	Cab-driver	1	Needlewomen	10	Fruit sellers	2
Gentlemen	3	Painter	1	Spinsters	6	Hawkers	2
Shoemakers	3	Hawker	1	Market-women	6		
Bricklayers	2	Sinkman	1	Widows	2		
General Dealers	2	Farmer	1				
Costermongers	2	Artificial Florist	1				
Hucksters	2	Ostler	1				
Fruit-sellers	2	Printer	1				
Glass-cutter	1	Man-servant	1				
Engraver	1	Unknown	1				
Coach-body Maker	1						
Musician	1	Total	62	Total	47		

Table VIII.

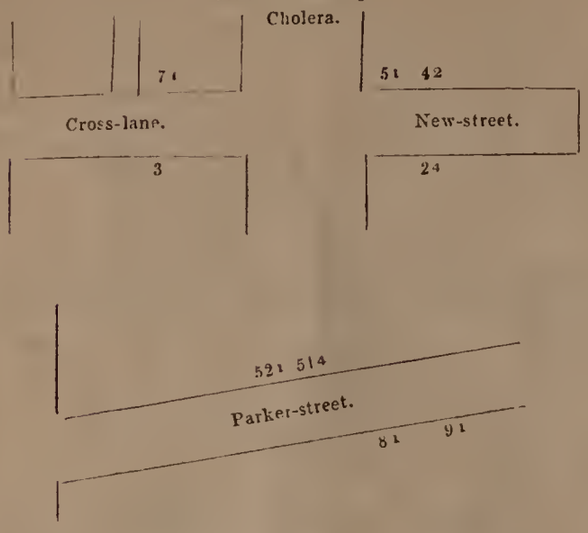
Mortality according to Family Order and Day of Attack.

Cholera.

	Men.	Wives.	Widows and Spinsters.	Sons.	Daughters.	Maid-servants.	Men-servants.	Totals.
Friday	3	7	6	4	3	1	1	25
Saturday	6	6	7	5	9	0	0	33
Sunday	4	5	5	7	9	3	0	33
Monday	15	7	11	8	4	1	0	46
Tuesday	14	16	7	8	9	3	0	57
Wednesday	6	6	6	9	3	2	0	32
Thursday	14	10	5	3	7	2	0	41
Total	62	57	47	44	44	12	1	267

TABLE IX.

Street Survey.



17, Savile-row, July 16, 1850.

DISEASE OF THE ANTRUM OF HIGHMORE.

By R. D. COUCH, Esq., M.R.C.S.L.

I observed, at page 32 of the new and improved series of your journal, a very interesting report from King's College Hospital of disease of the antrum. From Mr. Fergusson's remarks the disease appears to be a rare one, and for this reason I have forwarded the subjoined case of a similar disease.

Mary P., a healthy countrywoman, aged 52, received a blow about three years ago on the right cheek, about one inch and a-half below the eye. She suffered a great deal of pain for some weeks; this became much better in about six weeks, but never entirely subsided. At the end of six months the face began to swell, and then she felt occasional fits of severe pain in the bones of the face and along the alveolar edge. This continued for two years; the swelling was not very large. About twelvemonths since the pain and swelling greatly increased. At this time it appears that she was repeatedly leeched and blistered, and, as these failed to afford her much relief, various other local applications were used, but without much benefit. A short time before I saw her a tooth had been extracted, without any good effect. On examination, it appeared that the disease was situated in the antrum, and that the pain and swelling were most probably caused by a confined fluid within the cavity. I could not discover that any discharge had taken place on the extraction of the tooth, though it was a decayed one. A small trochar was passed through the socket of the extracted tooth, and then forced through the bony plate which separated it from the maxillary sinus. A discharge of sero-purulent matter followed, which was very offensive to the smell. After this she continued comparatively easy for some months; but, the disease not subsiding in the manner I anticipated, another examination was made, and over the socket of the extracted molar there was a small abscess. On opening this the bone was discovered to be diseased, through which there was a small opening. The gums were then divided from their attachments by a scalpel, and the whole of the diseased bone was then laid bare. The opening was enlarged with a bistoury, and afterwards with a bone forceps, and the cavity laid bare. There was some difficulty, though the mouth was a large one, in raising the lips sufficiently to get a clear view of the whole part. This, however, having been done, the cavity was exposed. The whole of the lining membrane appeared villous, and showed signs of long continued congestion and inflammation. The inferior portion was ulcerated, and a thick grumous fluid was oozing from the part. At the posterior portion a mass of flesh seemed to occupy the whole place. On exploring this part, the mass seemed pendulous, with a contracted peduncle. This was brought down with a torsion forceps, and removed with a bistoury as high up as the root. Having examined again the surrounding bone, and removed all that seemed diseased, the lip was brought down and the wound dressed. A fetid discharge frequently occurred through the nostril, and fluids at first would occasionally pass from the mouth through the sinus into the nose; but this gradually became less frequent, and the patient is now recovered.

In this case the disease seems to have arisen from a blow over the antrum, and the diseased tooth may, perhaps, have been the predisposing cause to the peculiar form which it assumed. In these days of chloroform, the operation described as being adopted by Mr. Fergusson may not be objected to; but it seems to be quite as severe as the importance of the case will allow; and, in the opinion of some, perhaps a little more so. The operation reported from King's College seems to be better fitted for a removal of some large portion of the superior maxilla than disease of the antrum alone; but, having chloroform at command, such views as these cannot have the weight they would have had in former years. I offer this case, however, only as an instance of a rare disease.

Penzance.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

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TUBERCULAR INFLAMMATION OF THE BRAIN.

IN continuation of this subject from the *Medical Times* of July 27, the following case comes not inappropriately after the one last commented.

Case 2.—Job B——, aged 18, a painter; admitted under Dr. Burrowes, June 1, 1850; John, front ward, 11. Fair-complexioned, strumous-looking. When admitted, was unconscious, pupils dilated and fixed, evacuations passed involuntarily; the right eye was closed and inflamed, in consequence, it was thought, of vinegar, with which his head had been bathed, having got between the lids. He was moaning and constantly moving his hands about, catching and pulling the bed-clothes. Skin dry and harsh; pulse 118, moderate volume, soft; tongue furred.

Three weeks previously, while walking, in his usual health, he suddenly felt numbness in the right side of the face and right upper extremity, and for a time lost the use of these parts. In about ten minutes this attack completely passed off and left him well again. In two or three days he had another similar seizure, which, like the first, was unattended by unconsciousness, and shortly passed off. After this, the attacks became much more frequent, occasionally amounting to four a day, but leaving him quite well and able to attend to his work in the intervals. Presently pain in the head ensued, and increased until it became so severe as to oblige him to cease from work; it commenced nine days after the first paralytic seizure, and never left him up to the time of his admission. He had only one fit after its commencement. He was quite sensible until two days before admission, when he suddenly became delirious, but subsequently regained his reason, and continued rational until the evening before he was admitted, when he again became delirious, but was calm and collected again the ensuing morning. While being brought to the hospital he became unconscious, but in a few hours after admission his consciousness returned, and he answered rationally, though in a petulant manner, and seemed much disinclined to speak.

During his unconscious state, on admission, he was ordered a turpentine enema, five grains of calomel at bed-time and a senna draught the following morning, and a cold lotion to the head. There was already a blistered surface at the nape of the neck, from a plaster applied several days previously.

The enema was retained for nearly twenty-four hours, and produced no sensible effect, consciousness having returned before its administration.

The next morning, it was noted that he had passed a restless night, rambling, but not violent; he was conscious, and rational, but spoke in a low tone; complained of pain in the

head; cheeks were flushed, head rather hot, ears cool, pupils less dilated, right eye still inflamed. Pulse 144, small, jerking. Tongue moist, thickly furred, white; thirsty; takes scarcely any nourishment.

He was ordered to have his hair cut close, and to have four leeches applied to the temples; to repeat the five grains of calomel night and morning, and to keep a cold lotion applied to the head.

The leeches took badly, and drew but little blood. He had another restless night, and would take no nourishment. Towards morning he became quiet, and then lay for several hours in a tranquil state, which gradually passed into death. He had no convulsions or fit while under observation in the hospital.

The body, examined forty-six hours after death, was not much emaciated; lower limbs slightly rigid. Skull natural, but its texture much congested. Dura mater congested; a little fluid blood in longitudinal sinus. Vessels of pia mater distended with blood. Surface of cerebral hemispheres dry and sticky; convolutions flattened, the interspaces almost obliterated. The tissue of the membranes at the base was infiltrated by a yellowish-green fluid. The cerebral ventricles contained about ʒiss of pale slightly turbid fluid: most of this escaped, as usual, on removing the brain. The interior of the lateral ventricles had a very finely and rather indistinctly granular appearance; the lining of the fourth ventricle was more distinctly granular. The cerebral substance of the parts immediately surrounding the ventricles was very soft, but not diffluent. The septum was somewhat torn, and broke down on the slightest touch. The general substance of the brain was much congested, and deficient in firmness and elasticity. Over the arachnoid lining the base of the skull, especially about the foramen magnum, several minute glistening granules were sparingly scattered. On the pleural surface of the diaphragm, and, to a less degree, on the costal surface of each pleura, were several small yellowish tubercular granules, arranged, for the most part, in groups. The lungs possessed a generally healthy appearance, and were of a bright red colour. On closer examination, however, there were found scattered rather abundantly through every portion of each, very minute circular tubercles, some semi-transparent and scarcely visible, except with a lens; others more opaque, and yellowish-white; the majority were surrounded by a ring of bright red pulmonary tissue, while some were imbedded in the midst of small spots of black pigment. The bronchial glands contained some yellow tubercular granules. The pericardium appeared free from granules, but a single yellowish-white tubercle was imbedded in the muscular substance of the heart immediately beneath the lining membrane of the left ventricle. With the exception of a finely granular appearance of the surface of the aortic valves, there was nothing else noticeable about the heart. The peritoneal surface of the diaphragm, especially at its posterior part, presented several tubercular granules; some scattered, small and semi-transparent; others more aggregated, larger and more opaque. The spleen was united to the diaphragm by means of these granules, which were thickly strewn over its surface. None were detected in the mesentery or other part of the peritoneum, or in the mesenteric glands, which, however, were larger than usual. Numerous tubercles were imbedded in the substance of the spleen, some being large and yellow, but the majority small whitish granules about the size of mustard-seeds. Liver healthy, except for the presence of a few whitish tubercular granules, situated immediately beneath, yet projecting above, the level of the capsule covering the gland. The intestinal canal was healthy, except that the solitary glands at the lower part of the ileum were filled with yellowish, probably tubercular, matter; the mucous membrane of the cœcum was inflamed, and of an ash-grey colour, probably from the effects of the turpentine injection administered two days before death. In the cortical structure of each kidney were several tubercular granules, each granule being surrounded by a zone of intense redness.

Here we have a case in which tubercle in its earliest form was found deposited in nearly every part of the body, and in which—if we admit, as I think we are justified in doing, the tubercular nature of the granules in the arachnoid—death ensued in consequence of the brain being one of the seats of the deposit. This tubercular deposition probably occurred almost coincidently in the several parts in which it was found, for the granules presented nearly the same general characters in every part. In many respects the case resembles the preceding one, especially in the severe constant headache, the taciturnity, the delirium, terminating in coma, and in the general course of, and period occupied by, the disease. With regard to the paralytic affection in this case, I may notice, that in one of the cases mentioned by M. Louis, (a) the disease was ushered in by gradually ensuing paralysis of the right arm, and of the muscles of the jaw; but in M. Louis' case, the paralysis was persistent, not paroxysmal, as in the case just recorded. The existence of tubercle within the muscular substance of the heart, as in muscular tissue generally, is a very rare occurrence, and is only met with in extreme cases of the tubercular diathesis. Rokitanski, who seems to have missed nothing in morbid anatomy which any one else has ever seen, speaks of the extreme rarity of this event, and has himself only witnessed it in combination with tubercular disease of the pericardium. (b)

Case 3.—William L———, aged 22, admitted July 8, 1850, under Dr. Hue, Matthew, back ward. About eight days before admission headache came on, and was presently succeeded by delirium. Both these symptoms were present when he came under notice, yet they were unattended by anything like febrile disturbance, and the pulse was only 60 in the minute. He was leeched to the head with slight temporary relief, but the headache and delirium, which latter was of a quiet kind, subsequently increased, and were followed by unconsciousness, which gradually ended in fatal coma thirteen days after admission, and about three weeks from the commencement of the headache. No distinct convulsions were noticed, neither had he any paralysis, and it was only on the last day of his life that the evacuations were discharged involuntarily. During the whole time he was under observation he was remarkably taciturn, little more than a drawling "yes" or "no" being obtained from him in his most conscious moments. *On examining the body thirty hours after death*, a strong mousy odour was perceived, independently of the smell of commencing decomposition. Emaciation was somewhat considerable. The skull was small, especially in front, thin, and loaded with blood. The dura mata was congested; vessels of pia mater turgid with blood, giving the surface of the brain a very dark appearance; arachnoid at the convexity dry and sticky. The membranes at the base were infiltrated with a greenish yellow fluid, rendering all the parts thereabouts indistinct, but there was no appearance of granules in the infiltrated tissue. Over the arachnoid lining the base of the skull, however, especially about the foramen magnum, several minute semi-transparent glistening granules were sparingly scattered. The convolutions of the cerebral hemispheres were flattened the lateral ventricles distended with about ʒij. of turbid whey-like fluid, the cerebral substance around, with the septum, being soft, pulpy, and floating in shreds in the fluid; the lining membrane of the ventricles was here and there very indistinctly granular, though it looked rough and uneven from the softness of the parts beneath. The brain generally was soft, especially the cerebellum and pons varolii. Imbedded in the substance of the posterior part of the right thalamus opticus, and projecting slightly into the corresponding ventricle, was a nearly circular mass of firm greenish-yellow cheesy tubercle about the size of a hazel-nut, surrounded by what seemed to be a dense layer of vascular pia mater, enclosing it in a kind of cyst. Microscopically, it presented the ordinary structureless character of old tubercle, not a trace of cells, nuclei, or fibres existing in the coarsely granular material of which it was composed. The parts immediately around the mass of tubercle were not softer or more vascular than elsewhere, though all the central parts as well as the cerebral substance generally were much congested. There were softening and erosion of the first dorsal vertebra, the eroded parts being filled with thick, yellow, scrofulous-looking pus. Several other collections of pus and thick cheesy-matter, were imbedded in the substance of the muscles of the back in the immediate neighbourhood of, but not in communication with, the pus around the diseased bone. A similar abscess, connected with the diseased vertebra, was situated deep in the neck, beneath the left clavicle, and was bounded in front by the apex of the left lung, the pleural surface of which was covered by thick concrete material in the form of a false membrane. The disease of the vertebræ had not

(a) On Phthisis. Sydenham's Society Edit., p. 295.
(b) Pathologischen Anatomie, Band ii., s. 468.

penetrated within the vertebral canal, and the portion of dura mater corresponding to the situation of the diseased bone was inadherent, and apparently healthy. The arachnoid of the theca and cord was universally studded with minute transparent glistening granules. (See Case 1, *Medical Times*, July 27, p. 87.) These, when scraped with a knife, were readily removed, together with a rather thick layer of tenacious mucus-like material, in which they seemed to be imbedded. The cord itself was soft, but not remarkably so, considering the weather and the time which had elapsed since death. In the heart there was nothing worthy of note, beyond the existence of several minute glistening pale-reddish particles along the lower festooned border of the aortic valves, to which they gave a finely roughened or granular appearance. Here and there, upon the surface of the lung were a few scattered whitish slightly elevated specks, each surrounded by a black ring: these were the only evidence of pulmonary tubercle. Several similar whitish particles were observed, slightly elevated, on the surface of the left lobe of the liver, and, in greater quantity, on the capsule of the spleen. With the exception of a small soft mass of yellow tuberculous-looking matter on the ileo-cœcal valve, the foregoing were the only signs of tubercular disease in the thoracic and abdominal organs.

In this case, as in the two preceding it, the most prominent symptoms were headache, followed by delirium, absence of general febrile disturbance, with (except in Case 2) a slow pulse, taciturnity, and gradually ensuing unconsciousness, terminating in fatal coma. The duration of each case was from three to four weeks, reckoning from the commencement of the headache; and the morbid appearances presented after death were, in all three, in many respects very similar.

There might seem a doubt about the propriety of calling the last case one of tubercular inflammation of the brain, for the peculiar granular appearance almost invariably observed in the membranes at the base of the brain, in such cases, were, in great measure, wanting in this instance; yet, the few scattered granules noticed on the arachnoid about the foramen magnum, and the abundance of them over the arachnoid of the cord, together with the other characteristic morbid appearances about the cerebral ventricles, appear quite sufficient to justify its being included in the same class with the cases already narrated. And, even were these points insufficient to establish its identity, further evidence for the scrofulous character of the inflammation in the brain would be afforded by the presence of the tubercular mass in the optic-thalamus, the scrofulous disease of the vertebra and collections of scrofulous matter in the substance of the neighbouring tissues, and by the tubercular granules, scanty though they were, deposited in several organs of the body.

Tubercular disease of the brain occurs in several different forms. Thus we find cases in which one, two, or more large masses are imbedded in various parts of the substance of the brain, where they may have remained quiescent for a great length of time, and have, perhaps, killed at last by the sudden lighting up of inflammation in the cerebral substance immediately surrounding one or more of them. The majority of the cases of tubercular disease of the brain recorded by Abererombie are of this kind; (a) and a full account of the varieties presented in the number, size, and other characters of this form of cerebral tubercle may be found in Rokitanski. (b) A second form in which tubercles occur in the brain is illustrated by the three cases which I have narrated, and seems to be characterised by a rapid deposition of tubercular granules in the membranes at the base of the brain, coincidently with a similar deposition in many other parts of the body, this deposition in the membranes of the brain being followed by inflammation and softening of the central parts of the cerebral mass, and constituting the disease described as acute hydrocephalus. Although almost exclusively confined to the period of childhood, yet the disease occasionally occurs in adult age, as in the cases just noted; and, at whatever period of life it presents itself its main peculiarity is, its almost invariable tendency to a rapid and fatal termination. This form of the disease seems to be sometimes combined with the form first described, as it was in the case I last narrated.

A third form, in which I have noticed tubercle deposited in the brain, is illustrated by the following case, which differs from those already detailed principally in the situation and general characters of the tubercular deposit, and the apparently slow progress of the disease, until the occurrence of inflammation, which led to fatal results.

Case 4.—Charles C——, aged 44, admitted March 15, 1849, under Dr. Burrowes: John, back ward.—A tall, emaciated worker in a powder-manufactory, complaining of cough and pain in the abdomen. Beneath the abdominal integuments in the epigastric, umbilical, and right iliac regions was felt a hard, irregular, nodulated mass, which was painful on pressure. He could not give any account of the commencement of this condition of the abdomen; but stated that he had been ill, principally with constant profuse diarrhœa, for about four months. The bowels were relaxed on admission, and continued so until his death, the evacuations being bilious and slimy, but without blood, which he said they had formerly contained. He had a cough of a fortnight's standing, and was said to have been light-headed the day before admission. Five days after admission he had three fits, during which he was convulsed, insensible, and had stertorous breathing, with bloody frothing at the mouth. On their subsidence he was dull and drowsy but conscious, and protruded his tongue, which deviated a little to one side; his evacuations passed unconsciously, but there was no distinct paralysis of the limbs. On the following day he had another fit, and two more in the succeeding night; these left him more drowsy and more difficult to be roused than he was before. He continued in a half-unconscious state through the next two nights and days, capable, except during the last few hours, of being roused so as to give an answer, but then relapsing into his former condition, which gradually ended in death.

On examining the body forty-six hours afterwards, the surface of the right cerebral hemisphere, about the middle part, felt very soft. The pia mater covering this part, especially where it dipped down between the convolutions, was rather thickly studded with firm yellow miliary tubercles, while similar bodies were scattered along the course of the larger vessels, to the walls of which they frequently adhered. None were found elsewhere in the brain. Immediately beneath the softened portion of brain just mentioned was a recent clot of blood as big as a walnut, mixed with broken-down shreddy portions of brain, and surrounded by yellow, soft, custard-like cerebral substance, in the midst of the upper portion of which, crowds of red points, apparently the orifices of small ruptured vessels, were visible. The ventricles were entire, and other portions of the brain tolerably natural. Both pleura were obliterated by old false membrane, in the midst of which were numerous yellow miliary tubercles. The lungs presented in their upper, and partially in their lower lobes, numerous scattered and grouped yellow tubercular granules, in the midst of very vascular, but otherwise healthy, pulmonary tissue. There were no cavities, though some of the tubercles were beginning to soften. Several chalky masses were imbedded in the left apex. The omentum was firmly adherent to the anterior abdominal parietes; its tissue being nearly an inch in thickness and stuffed full of largish yellow tubercles. Similar tubercles were abundantly deposited over the peritoneal surface of the abdominal parietes, in the tissue of the mesentery and other folds of the peritoneum, between the adherent coils of the small intestine, and upon the capsules of the several abdominal organs. The liver was surrounded by a dense false membrane with tubercles imbedded in it. In the small intestine, near the ilio-cœcal valve was a large tubercular ulcer, about an inch in its long diameter, which was transverse to the canal of the intestine: the base was formed of submucous tissue, containing tubercle, the edges thickened, elevated, and of a dark red colour, while the surrounding mucous membrane was of a bright rose tint. The mucous membrane of the cœcum and ascending colon was of a brilliant red colour, soft and swollen. In the transverse colon was a tubercular ulcer, rather larger than, but in other respects similar to, that in the small intestine. A small dead lumbricus was washed from the intestinal canal. Several small yellow tubercles were scattered through the cortical substance of each kidney.

In addition to the remarks which preceded this case, little further comment seems called for. The tubercular deposit in the various organs was obviously of long standing, as indicated by the size, firmness, and yellow colour of the masses, and by the thickness and density of the false mem-

(a) On Diseases of the Brain, &c. 3rd Edition. P. 162, *et. seq.*
(b) Pathologischen Anatomie, Band ii., s. 835.

brancs, in the midst of which many of them were imbedded. The general resemblance, in firmness and colour, of the tubercles in the pia mater to those in other parts, make it probable that they also were of about the same date, and had, therefore, existed in a comparatively harmless state. In explanation of the apoplexy, it may perhaps be correctly held, that the tubercles at length excited inflammatory softening, in consequence of which the delicate vessels in the softened parts gave way, and so produced the fatal hæmorrhage.

I may conclude this subject by the following brief account of a case in which delirium ensued at the end of tubercular disease of the lungs and abdomen, yet was independent of any tubercular affection of the brain. It may be regarded as an example of delirium resulting simply from exhaustion.

Case 5.—John F——, aged 48, admitted July 1850, under Dr. Burrows: Matthew, back ward. This patient came in to die, having all the symptoms of advanced phthisis. A year ago he had had hæmoptysis, and had been ill ever since. He had perceived fulness of his abdomen for about five months. He became greatly emaciated and exhausted; and two days before death, he suddenly jumped out of bed in a state of delirium, and struck at a fellow-patient; the delirium continued until his death, and rendered it necessary to keep him constantly strapped in bed. Wine and nourishment seemed to pacify him for a time; but he gradually became more exhausted and died.

The body, when examined twenty-six hours after death, was found greatly emaciated. The brain was rather congested and soft, and about two ounces of clear fluid were present in the arachnoid and ventricles. There were no tubercles, and no appearance of inflammatory affection of the membranes or of the brain itself. The cerebral vessels appeared healthy. Both pleural cavities were obliterated by old, firm, false membrane. The lungs were studded throughout with isolated and grouped tubercular granules, the majority of the grouped masses being dry and shrivelled, and the pulmonary tissue dense and pale around them. Near the left apex were several small tubercular cavities. The peritoneal cavity was obliterated, and all the viscera agglutinated together by old cellular tissue, in the midst of which were numerous scattered masses of firm yellow cheesy tubercle, mostly about the size of split peas. Many such tubercles were imbedded in the walls of the intestines, the several coils of which were inseparably matted together, all attempts to unravel them being followed by yielding of the coats and escape of fæcal matter. In a portion of the lower part of the ileum, which was examined internally, was a large transverse tubercular ulcer, which had penetrated through all but the serous coat: other similar ulcers would doubtless have been found if searched for. Several small masses of yellow tubercle were imbedded in the cortex of each kidney. W. S. K.

GUY'S HOSPITAL.

By S. O. HABERSHON, Esq., M.B., Lond,
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INTERNAL STRANGULATION OF THE LAST 18 INCHES OF THE SMALL INTESTINE. FATAL AFTER 38 HOURS.

Henry W., aged 19, employed at a lead and colour manufactory in Tooley-street, had colic a year ago, but at the time of admission no trace of lead existed on the gums. He was of pale complexion, with light hair, and had his usual health till Sunday, July 28th, at 7 p.m., when, soon after drinking some beer, he was seized with pain at the lower part of the abdomen, towards the right side. About an hour after this he had moderate action of the bowels. Sickness came on about nine o'clock, and during the night he vomited whatever he took, consisting of brandy and water. An injection, administered before admission, came away with scarcely a tinge of feculent matter. He was brought to Guy's at 10 p.m., July 29th, under Dr. Barlow's care, in an almost pulseless state; heart 144; the face and extremities cold; frequent eructations; the abdomen rigid, tympanitic, and very tender on pressure; the tenderness commenced at the lower part of the umbilical region; the tongue flabby; no urine passed; his respiration entirely thoracic.

9 a.m., the day after admission, the abdomen was tense, slightly hollowed out in the right hypochondriac region, and tender on pressure. He was very restless, turning from side to side in bed, his legs occasionally drawn up. Passed a restless night, with the same symptoms as present on admission: his pulse could scarcely be felt. Shortly after this, he was allowed by the nurse to rise up in bed, became faint, and died in about half an hour, 38 hours after the commencement of the pain. On examining the abdomen, several pints of bloody dirty serum were found in the peritoneal sac. The whole of the small intestine was much distended, but several coils, corresponding to the last 18 or 24 inches of the ilium, were in a state of approaching gangrene. The latter had become strangulated by a diverticulum from the small intestine, about 1½ inches long, and a band passing from the mesentery to the cœcal end of this pouch. The large intestine was less contracted than is generally observed in such cases. There was evidence of general peritonitis, lymph between the coils of intestine. The mucous membrane was continued into the pouch, and much imperfectly masticated cocoa-nut, and the remains of gooseberries, which he had eaten the morning of the attack, were found in the intestine. The remaining viscera healthy.

This case is worthy of being recorded, as presenting peculiar difficulties in diagnosis; for, whilst the urgent vomiting, the state of the abdomen, and the mode of the attack, pointed it out as one of mechanical obstruction, the great depression and rapid termination seemed to refer it to rupture of the bowel. These latter peculiarities, however, probably arose from the extent and completeness of the strangulation leading to rapid gangrene. The hernial sac was represented by the general sac of the peritoneum containing a considerable quantity of bloody serum. The state of the gums afforded no evidence of poisoning by lead. The position of the pain was not that arising from disease of the cœcum; nor does suddenness of pain always characterise mechanical obstruction,—pain may be absent for a considerable period. A slight constriction of the canal becomes so increased by irregular peristaltic action and over distension as to become complete. A patient may for years suffer from slight attacks of pain, from irregularity of the bowels, till, after some indiscretion of diet or other cause, he has a recurrence of pain and vomiting with constipation, or the bowels are acted upon slightly; no tenderness of the abdomen is present, but rigidity of the abdominal muscles; the vomiting continues, he has no further action from the bowels, but hiccough, rapid prostration of strength, and death speedily follow. The diagnosis here becomes beset with difficulty. Abercrombie records several cases of this kind, where there was adhesion without narrowing of the canal existing probably for years, till, from some unknown cause, complete and fatal obstruction took place; and cases repeatedly present themselves where organic disease of great extent has existed for a considerable period, and symptoms of obstruction are manifested only a short time before death. A case of the former kind was lately observed at Guy's. Slight disorder of the bowels was followed in a young man by colicy pain in the umbilical region after eating some apples and cherries. The bowels were acted on twice, but vomiting and pain continued; the undigested food was removed from the stomach, which for a short time became quiet; the vomiting, however, soon returned, and severe pain, with rigidity of the abdominal muscles, came on, but no tenderness on pressure. Calomel and opium were administered but quickly rejected; prostration of strength and death speedily ensued, thirty-five hours after the commencement of the more severe symptoms. Some shortening of the mesentery near the termination of the ilium, from strumous glandular disease, and slight thickening of the coats of the intestine, without apparent narrowing of the canal were found; there was great distension and congestion of the intestine above, and a pale contracted state of the whole of the large intestine. Slight evidence of peritonitis existed. Here the adhesion of the gut appeared to produce scarcely any inconvenience till the presence of irritating ingesta excited an attack of simple colic, which to another person might have been the only result; the slight contraction, however, became aggravated by the irregular peristaltic action, and was rendered complete by the over-distension of the parts above. Even in the case first related, the intestine might have continued in healthy action, though beneath the diverticulum and the band attached to it, till the sudden distension of the coils of intestine, and perhaps of the pouch itself,

served to separate one part from another, and to strangulate the incarcerated portion. The diverticulum was probably not of congenital origin. A similar case has been observed to arise from adhesion to the commencement of the inguinal canal after hernia and artificial anus. (a)

The treatment most likely to prove successful in mechanical obstruction is well shown in the following case, for the particulars of which, and remarks upon it, I am indebted to the kindness of Dr. Gull.

MECHANICAL OBSTRUCTION — TERMINATING IN A FAVOURABLE RESOLUTION, UNDER THE USE OF OPIUM AFTER 78 HOURS.

J. S., aged 33, a coal-porter on a wharf, rose on the morning of the 26th June, 1850, in his usual health, and, before going to his work, went, as his habit was, to stool, and had a good evacuation from the bowels. About half an hour afterwards, whilst stooping to fill a sack, he was suddenly seized with a sharp pain across the abdomen in the hypogastric region, accompanied by a sense of constriction. He was obliged to leave his work and to go home; in a short time he began to vomit, and, since the attack, has been unable to pass anything downwards. He was treated by Mr. Mitchell, of Deptford, but without effect, and, on the evening of the following day, forty hours from the accession of the symptoms he was sent to the hospital with a note, saying that no hernia could be found, but that an internal obstruction was suspected. I obtained the assistance of Mr. Cock, who examined all the outlets, but could detect no protrusion. On admission he had the usual symptoms of strangulated hernia; urgent vomiting; anxious countenance; pulse rather frequent; temperature of surface depressed; abdomen rigid, rather tumid, and slightly tender on pressure; urine small in quantity, and high coloured. He was ordered opium a grain every four hours, and to abstain from indulging his thirst. The report of the third day at noon is, that he passed a restless night, vomiting continually. He was seen early in the morning, everything was interdicted, even to cold water, and he is now better; the paroxysms of pain in the abdomen being less urgent. As he was under the influence of opium the dose was diminished to half a grain, and a copious enema of salt and water was thrown by a long flexible tube into the rectum; it passed up readily, but returned without bringing away any feculent matter. In the evening he was restless; his countenance anxious; the vomiting and other symptoms continuing as before.

4th day, eight o'clock a.m.—He vomited during the night in considerable quantity; the abdomen is tense, and coils of distended intestine can be partially traced, the peristaltic action making them prominent, with the accession of pain in the abdomen, of which he bitterly complains. His countenance is still expressive of great anxiety, and the features are shrunk. He has passed about half a pint of urine clear and well coloured; the pulse accelerated and diminished in power. He was ordered to go on with the opium. During the morning his abdomen was exposed for some time, whilst a sketch was made of its peculiar form, and the position and direction of the prominent convolutions, in order to determine more accurately the precise seat of obstruction, when suddenly, about noon, he expressed himself relieved, saying, that "something had given way within him;" and this feeling was quickly followed by a copious flow of liquid fæces inundating the bed. From this time he steadily recovered; the vomiting and hiccough at once subsided, and the face acquired a cheerful expression.

Certainly, no cases present a less promising prognosis than those of mechanical obstruction of the intestines, nor has the enterprise of modern surgery yet succeeded in diminishing their mortality. The case here recorded, presents points of no common interest; that it was one of mechanical obstruction there can be but little doubt, and, if so, we had an instance of its spontaneous solution, and it answers in the affirmative the question, Can we hope for a successful result in mechanical obstruction without surgical interference? From what we have recently seen in this hospital, there is reason to believe that irregular peristaltic action, following upon indigestible food, is not an uncommon cause of internal misplacement; but, in the case here recorded, it came on after a night's fast, and before any meal had been taken in the morning. He rose as well as usual; the bowels acted according to his daily habit; he went to his work in good health, but whilst in a stooping position the pain came on. It need not be mentioned that there was neither history nor trace of lead in the system, nor, indeed, were the symptoms such as arise from that mineral. The only remedy trusted to in the treatment was opium, but the happy termination of the case, while the abdomen was exposed to the cold air, renders it probable that moderation of temperature had somewhat to do with the result. The application of cold has been suggested in such cases, and has much in theory to recommend it, and might be expected, in conjunction with opium, to effect all that mere treatment can effect. For, suppose a portion of intestine to have insinuated itself under any accidental band in the abdomen, by what means can we so well hope to liberate it as by reducing its volume, and by allaying the vomiting. I would also suggest, whether opiate suppositories would not sometimes more efficiently promote the latter object than opium by the stomach. Of the opiate plan of treating intestinal obstruction too much cannot be said. It has both reason and experience on its side; and yet, in the reports daily given of such cases, purgatives form generally the early part of the treatment, and are persevered in until the stomach will bear them no longer, serving only to exhaust the patient and increase the symptoms.

(a) "Abercrombie on Diseases of the Stomach," &c.

CHARING-CROSS HOSPITAL.

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PURULENT OPHTHALMIA.

The following case is recorded more to exemplify an unusual mode of treatment, than for any peculiarity in the disease itself.

Case.—E. B., aged 26 years, a servant residing in Crawford-street, Marylebone, admitted June 23, 1850. About three days ago, the left eye began to discharge very thick matter, and the lids to swell. It continued to become worse, accompanied with a great deal of pain, till she applied at the Hospital this day. She has never had any discharge from the vagina, nor any disease of those parts. There was no reason to consider it gonorrhœal, but that it was owing to exposure to wet and cold.

The appearance of the eye was as follows:—The cornea as yet clear, the conjunctiva extremely vascular, and chemosed round the cornea; the upper lip very much swollen, with a thick yellow discharge running from it; pain very great, especially at night. She was ordered to be cupped from the temple to 8 ounces, to have the alum lotion continually applied, and to take half a grain of opium, with one grain of quinine three times a day.

On the following day a small white spot had formed on the lower part of the cornea, the pain was much less, but the discharge the same.

On the 24th the chemosis was much less; the pain gone, and the white spot had not increased in size. From this time the eye continued to improve; the extreme vascularity and chemosis of the conjunctiva disappearing; a very minute superficial ulcer taking the place of the white spot; the discharge ceasing, and with it the swelling of the upper lid. Her recovery has been retarded by an obstruction of the nasal duct, giving rise to the formation of an abscess, which had to be opened, and a style introduced. The eye has now perfectly recovered its former state. She continued to take the same medicine from the commencement. After the severer symptoms had subsided, the inner surface of both lids was lightly touched every morning with sulphate of copper.

The above case illustrates a point in practice with regard to depletory measures; for, although local bleeding in purulent ophthalmia is of extreme use to relieve the tension of the vessels of the part, yet general bleeding is not advisable, for the system, in the majority of cases, is below par, and more benefited by tonics. Mr. Hancock, in his clinical remarks on the treatment adopted in this case, observed, that he had found it to occur far more commonly in persons of a weak and delicate constitution, than in the robust and plethoric, and though he had tried quinine before, yet he was determined to see the effects of it in combination with opium; with what success has been shown.

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THE MEDICAL TIMES.

SATURDAY, AUGUST 24.

THE NEW MEDICAL REFORM BILL AND ITS TENTH CLAUSE.

We recently expressed, in strong terms, our dissent from the Medical Reform Bill of the National Institute. Our disapproval rested on two grounds,—firstly, That the scheme was impracticable; and secondly, That, if by any possibility it should be carried into action, serious injury would be inflicted on the existing corporations, the General Practitioner be less highly educated than at present, and consequently the public, as well as the profession, be losers by the change. Passing by the further consideration of the impracticability of the scheme, let us consider a little more fully its desirability. None have more strongly than ourselves urged the propriety of granting to the profession for a head a council elected by general suffrage. We are satisfied, as we ever have been, that such a constitution alone will bring peace to our troubled body. But we have a higher duty than a professional, *i. e.*, a public duty, and will never be a consenting party to any Bill by which the standard of education, low enough at the present moment, must inevitably be still further reduced.

To gain the right of self-government, the Council of the National Institute have, in the Bill before us, yielded every thing worth retaining, from the name of surgeon to an efficient control over the professional education of the General Practitioner. It is to clause 10 of the Bill that we especially object; that clause sacrifices all that is essential to secure to the public efficient medical attendants, for the sole purpose, apparently, of obtaining the support of the Scotch Universities.

Let the Council of the Institute remember that men educated in Edinburgh stand, so far as concerns their relation to the present licensing boards, precisely on the same footing as those educated in London, — and that the new College might as well give a license without examination to every student of University, King's, or Bartholomew's Colleges, London, who may be *declared by his teachers* qualified to practise, as to admit *ad eundem* the graduates of Edinburgh, Aberdeen, and St. Andrews. The largest of these Universities, the University of Edinburgh, differs only from the English metropolitan and provincial colleges in this, that whereas the latter teach and grant to those students who prove themselves to have mastered the knowledge placed within their reach, testimonials of having done so in the form of honorary certificates, the former grants to the same class of students degrees. The teachers, in both cases, are the examiners; and the degrees, like the honorary certificates, are granted only to those who have paid to those same teachers a class fee. If the professors of the Edinburgh University are to grant a license to practise, then let the professors of University, King's, Bartholomew's, and Guy's Colleges, London, of Queen's College, Birmingham, &c., do the same. What claim to the privilege the Scotch professors have, which the English professors do not share, we are unable even to guess. Common justice demands that all should be treated alike.

The existence, however, of several Boards of Examiners, each paid according to the numbers who pass it, would lead to the most unseemly contests. It may be answered, that the Bill provides against this evil, by giving to the Central Board the power to exclude any university, the examination at which does not come up to their standard. But how are they to ascertain the quality of the examination? Look at the St. Andrews questions, lately published in the *Medical Times*. They would, perhaps, be high enough; but then, the weighing the worth of the answers must rest with the examiners,—examiners having a direct money interest in passing a large number of candidates, and a still larger money interest in the numbers who attend their classes. The examiner and professor, the two in one, to be paid according to the size of his class, and the numbers of that class he finds qualified to practise! If his rejections be numerous, he stamps himself as an incompetent teacher, and effects an unpleasant reduction in his own income. Let him pass all who have attended his prelections, and he proves how excellent is his method of teaching, and doubles his income—at once a pleasant reflection and a cash gain. Can we expect a Scotch or an English professor to call aloud, "Write me down an ass," and at the same time to scatter his income to the winds, when, with less trouble, he may grow rich in lucre, and bid the world wonder at his wisdom?

Given in the one scale that which tickles the vanity and fills the pocket, in the other that which inflicts a wound on the former, and puts a let on the latter, to determine how the beam would turn. A tyro in this world's arithmetic might solve the problem.

Defective, then, as is the present system—a system by which one licensing body is obliged to elect for examiners men who have neither the general nor professional confidence—men lacking scientific status—men, rejection by whose dicta is considered no disgrace, and the license conferred by whom is considered no honour,—a system by the action of which it comes to pass, that the only body in England empowered to examine in surgery, publicly states that its members are not proved, by education or examination, to be qualified to undertake more than the ordinary exigencies of surgical ministrations; members whom, to-morrow, a railway accident may call to display the highest surgical knowledge, and to exhibit the greatest surgical skill,—Sir George Grey himself being the patient, and Mr. ——, the village surgeon, the operator (a)—a system, that is to say, by which the great bulk of the profession are deliberately, for the unholy purpose of exalting a chosen few, turned loose on the country to kill or cure, confessedly imperfectly educated; nay, more, a system by which all those who please are permitted

(a) We suspect Mr. Sands Cox will not be in a hurry to leave Birmingham again, at a moment's notice, to attend unknown railway travellers; and at such a moment who is known—a Marquis smothered in mud might be mistaken for a stoker.

to sally forth and assume the name of surgeon, without having submitted even to that *something better than nothing*—that trumpery ordeal called the "members' examination at the College of Surgeons." Not long since a licentiate of the Hall, not a member of the College, was called on to amputate the arm of a near relative of the late Sir Robert Peel. His gun burst, his hand was shattered, and Sir Benjamin was some 200 miles away. He did it, and, from what we know of his surgical skill, we doubt not, did it well; but that the limb was not more fearfully mangled by the knife than by the shot, no thanks are due to the College or the Government. And yet, defective as we admit the present system to be, we would rather it should continue a little longer,—satisfied that its monstrous imperfection must one day lead to a change,—than that a new scheme, so injurious to the best interests of medical science as that of the National Institute, should be put into execution. For once remodel the whole profession, and when would a Minister be found mad enough, officially considered, to attempt to legislate anew on the troubled question of Medical Reform?

We willingly concede to the Council of the National Institute the credit of being animated by an earnest desire to serve the profession; but their conviction that a new College, with the representative principle for a basis, is imperatively demanded, has led them, in this instance, to overlook the injury their attempt to gain over the Scotch Universities must necessarily inflict on the public and the profession.

THE ORDER OF THE BATH GRANTED TO NAVAL AND MILITARY MEDICAL MEN.

It will be seen in another part of this journal that Sir James M'Grigor, the Director-General of the Medical Department of the Army; Sir William Burnett, the Director-General of the Medical Department of the Navy; and James Thomson, Esq., Inspector-General of Hospitals on the Bengal Establishment of the East India Company's Service, have been made Knights Commanders of the Bath, or admitted as ordinary members of the *military division* of the *second class* of the Order. Seventeen army and navy physicians and surgeons have also been made *Companions* of the Bath; an honour which gives no title, but merely authorises the person to whom it is granted to write C.B. after his name, and wear a certain badge on state occasions. These *Companions* are also members of the *military division* of the Order, but of the *third class*.

Many members of the *civil* classes of the profession—ourselves among the number—thought that naval and military medical officers ought to be content to become members of the civil divisions of the Order of the Bath, and this opinion was strongly supported by the executive officers of the two services. But those who were serving their country in the field, those who had served with St. Vincent, Howe, Collingwood, and Nelson,—those who had followed Wellington from Vimiera to Toulouse,—those who had coolly performed their arduous duties under the fire of the batteries of Algiers, and had seen their colleagues wounded beside them at Aboukir and Trafalgar, at Waterloo and Sobraon,—who had shared with their executive comrades the dangers of the fight without its excitement—who had undergone the same privations in the besieged city or the blockading ship,—who had borne the forced march, the gale, and the foreign prison, with equal fortitude,—who had participated in the fatigue and famine, the shipwreck and the retreat,—who had felt the horrors of defeat, but were refused the rewards of victory: these men regarded with very different feelings a class prejudice, which placed them in the same order with those who had earned their badges of distinction by services performed at a desk in Downing-street, at Whitehall, or in Somerset-house. They refused to accept an order which, so far from rewarding military service, was felt to be an insulting denial of the performance of such service. They fought for a principle; and the man can have little professional pride or brotherly feeling who does not heartily congratulate them upon the triumph of the principle, and upon the recognition of the justice of their claims, however tardy it has been.

The Order of the Bath was instituted in 1399, by Henry IV., who created forty-six knights on the day of his coronation. It appears, however, that the practice of *bathing* before the dignity was conferred,—from which practice the title of the Order is derived,—was a custom of the Franks of Lower Germany, and that William the Conqueror and succeeding Kings of England created knights of the Order. From the regular institution under Henry IV., knights were created at the coronation and marriages of our kings until the time of Charles II., when the custom sank into disuse, and no more creations of Knights of the Bath took place until the revival of the order by George I., in 1725. It was enlarged in 1815, but remained exclusively a military order until 1847, when the classes of *Civil* Knights Commanders and *Civil* Companions were created. In the latter classes some influential persons wished to include certain medical officers, whose war services were of a most distinguished character. The officers in question refused the doubtful distinction, and they have at last succeeded in establishing their claims to a military decoration, as a reward for military service. Among the *Civil* Knights Commanders are—Sir Henry Bulwer, Sir Henry Ellis, Sir George Grey, Sir Charles Trevelyan, and others, whose services are of a very different nature from those of Sir William Burnett and Sir James M'Grigor. Of the *Civil* Companions, Mr. George Anson, Mr. Edwin Chadwick, Sir H. De la Beche, Mr. Shaw Lefevre, Mr. Richard Mayne, and Mr. Alexander Milne, have obtained their distinctions in fields not less honourable, perhaps, but far less dangerous, than those in which the seventeen naval and military surgeons, just created Companions of the military division, earned their prize.

It will be a question hereafter, whether the medical officers obtain their fair proportion of crosses and ribbons now that the justice of their claims is recognised. The number of the members of the various classes is limited within definite bounds, which cannot be exceeded without a new charter. The number of medical officers is also small, when compared with that of executive officers equally entitled by war services to admission into the Order of the Bath. Surprise will doubtless be expressed, that men of acknowledged claims have not been rewarded; but it must be remembered, that the Order is limited in number, and that while our military brethren have fought for their share of admissions, they have only demanded that this share should be a fair and just one. Men of great merit are doubtless disappointed, but until it shall appear that executive officers have unfairly supplanted their medical messmates, we can only bid them "bide their time." We shall, however, take an early opportunity of ascertaining the proportion of the different classes of officers in the two services, as compared with their relative numbers in the different divisions of the Order of the Bath, and shall not fail to expose any injustice which our brethren are proved to suffer.

CASE OF MR. DYCE SOMBRE.
THE PLEA OF INSANITY IN CIVIL CASES.

The Court of Chancery has granted an order for the re-examination of Mr. Dyce Sombre, with the view of ascertaining whether the present Commission of Lunacy should be superseded or not. It has been decreed that the Lord Chancellor is to appoint two physicians, probably the same named by Lord Cottenham—Dr. Bright and Dr. Southey—and two other physicians are to be nominated by the alleged lunatic and the Committee of the person. The examination will take place on the 20th of October, in order that the Report may be taken into consideration during the next Michaelmas Term. In the mean time, Mr. Dyce Sombre has, we think unadvisedly, put into private circulation a thickly printed volume, containing an *ex-parte* history of his case, with a variety of documents annexed, which, for very obvious reasons, we forbear noticing in the present stage of the proceedings. The efforts which he has already made to get rid of the thraldom of the injunction have been unremitting. He has submitted to the examination and cross-examination of Committees of medical men in Paris, Brussels, London, &c.; and not many months ago, it may be remembered that a Report was presented to the Lord Chancellor, signed by six physicians, who not only gave their opinion that he was perfectly sane, but exceeded the bounds of strict professional duty, by arguing that the Commission ought forthwith to be superseded. Upon this occasion Mr. Dyce Sombre gave a singular evidence of his rationality, he cut up into small pieces a thousand pound Bank of England note, and sent it to Lord John Russell, as if the Prime Minister of this country could be brought over by a lure of bribery to influence the judgment of the Lord Chancellor. These different reports availed nothing. We will not speculate upon the cause. We, however, unhesitatingly concede, that the case of Mr. Dyce Sombre is thus far remarkable, that although a Commission of Lunacy exists against him, he is allowed a sum of not less than 3000*l.* a year, and permitted, without any surveillance, to wander abroad wheresoever he pleases, always provided that he does not come within the circle of his own home, or attempt to breathe the same atmosphere as his wife. This does appear to us anomalous, for if any person be sane enough to be entrusted with so large an income, and permitted by the Lord Chancellor to enjoy personal liberty on the Continent, we cannot understand why the same privileges should, upon his arrival here, be wrested from him the moment he claims his marital rights. However, the Court of Chancery, upon the present application, has obviously evinced every disposition to deal fairly with the case; and Mr. Dyce Sombre being himself authorised, with the Committee of the person, to nominate two physicians, he will hereafter have no reason to complain.

Upon this point some circumspection should be used; for among the eminent practitioners in the metropolis there are many whose opinion will have great weight with the Court. We do not confine our attention to professional men connected with lunatic asylums; for we believe that physicians in general practice,—such men as Clarke, Fergusson, Holland, Forbes, Addison, Copeland, and a host of others we could mention,—are as capable of giving a correct diagnosis in disputed cases of insanity as any of those medical men who are the licensed custodians of lunatics. We by no means wish to depreciate the merits of these gentlemen, for many of whom we entertain the highest respect; but it is notorious that the opinions of these lunatic doctors (as they are termed) have not that weight with the public which the opinions of other professional men unquestionably command. The reason of this is evident. From living very much with insane persons, and confining their attention *exclusively* to this branch of practice, they are apt to adopt prejudices which give a bias to their judgment. Hence they discover, in all kinds of eccentricities, the germs of insanity; and, in the recent case of Bainbrigge *versus* Bainbrigge, they went so far as to affirm that "want of cleanliness, carelessness of dress, and profane swearing, were symptoms of declining intellect in persons of advanced years;"—as if hundreds of old men could not be found addicted to these bad habits who are nevertheless of perfectly sound intellect. The Court, in this case, desired the medical witnesses to confine themselves to facts, and not prejudge the case in the mind of the jury by giving any opinion respecting the sanity of the testator. This direction is complained of by a medical contemporary as having been very arbitrary; but it is to be considered that there is no analogy whatever between doubtful cases of insanity and ordinary surgical or medical cases. The surgeon or physician may clearly enough give his prognosis in cases of fracture or fever; the symptoms they have to deal with are visible and tangible, and their experience will afford them unerring *criteria* for forming a correct judgment. But when we come to deal with the human mind, the invisible and subtile spirit which governs human action, we are obviously dealing with an incorporate essence, the nature and conditions of which are incapable of demonstration. The custodians of lunatics have no clue to thread the labyrinth through which the mind passes, whether in health or in disease, which can guide them better than other professional men. They enjoy, however, from taking up this department of practice, a species of authority which renders a rash opinion propounded by them of serious importance, inasmuch as it may mislead the jury, and thereby frustrate the ends of justice. This was manifestly the feeling of the Court in the case of Bainbrigge *versus* Bainbrigge; and we believe it to be the sentiment of the public. Hence one of the most popular of our Sunday journals (the *Sunday Times*, August 11th) observes, in reference to this case, "A medical man, like any other witness, should merely confine himself to the facts which come within his knowledge, and leave to the jury the deduction to be drawn from those facts, in which deduction or verdict they are assisted by the painstaking summing up of the judge, who is, be it remembered, a deeply-read medical jurist. Suppose a lawyer were a witness, and suppose his opinion were to be taken and adopted by the jury as their verdict, what would be thought of such an administration of the law? If the evidence of medical men is to be substituted for the palladium of British liberty, why summon a jury at all when a monomaniac or a supposed lunatic is to be tried? To do so under such circumstances would be an unpardonable waste of the public time, and would make our criminal law a mockery and a delusion. But the day for monomaniacism and accommodating insanity is gone by. '*Nemo mortalium omnibus horis sapit*,' therefore we should keep moral restraint over ourselves, as well as guard against those acts of omission and commission that may injure our neighbours." These observations, we repeat, convey the common-sense opinion entertained by the public. The plea of insanity, in civil as well as in criminal cases, should be borne out by positive *facts;* and, although the wings of speculation may hereby be clipped, the evidence will be all the more satisfactory, more especially if given by physicians of eminence who are free from theoretical prejudice, and enjoy the reputation of being otherwise successful practitioners. Our knowledge of the constitution of the

mind, in health and in disease, is not sufficiently advanced to render this a legitimate specialty; and it is therefore right that unsubstantial notions and empirical opinions upon insanity should not be tolerated in our courts of justice. If a jury cannot be enlightened by facts, its judgment ought not to be misled by theories.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Fifth Fasciculus of Anatomical Drawings, selected from the Collection of Morbid Anatomy in the Army Medical Museum at Chatham. London: 1850.

The fourth Fasciculus, which embraced diseases of the heart and blood vessels, was published in 1841; the present contains diseases of the urinary organs. It consists of 18 plates, taken from preparations contained in the Pathological Museum at Fort Pitt. There are in that Museum 248 preparations illustrative of urinary pathology. Of these, 60 have been drawn on stone, by Mr. G. Ford, of Hatton-garden, for the present Fasciculus, viz.:—

Diseases of the supra-renal capsules . .	2
,, kidney and ureta . .	27
,, bladder	13
,, prostate gland . . .	4
Urinary calculi	5
Lesions of the urethra	9

The drawings are exceedingly well executed, and, as we can bear witness, from inspection of many of the preparations figured, faithful representations. Copied from objects long macerated in spirits, it was, of course, impossible to colour them.

We lately spent some hours in the Pathological Museum at Fort Pitt. It is well kept, although not large—perhaps hardly so large as we might expect, considering the field from which specimens can be procured, and that 250*l.* a year is allowed by Government for the expenses of the Pathological and Natural History Museum. It is rich in some subjects, as the fasciculus before us shows. Diseases of the liver, especially abscesses, are well illustrated in the Fort Pitt Museum, but we looked in vain for an unequivocal specimen of healed abscess of that organ. Of the three preparations so designated in the catalogue, two appeared to us mere examples of circumscribed thickening and contraction of the capsule; the third, so far as the turbidity of the spirit, and the small size of the bottle permitted us to examine it, merely a specimen of effusion of contractile lymph into the hepatic substance. The history of these three cases, moreover, rendered it highly improbable that either had ever suffered from abscess of the liver.

The collection of drawings is small; but in it we notice one of considerable interest. It is marked "Portion of the ileum and mesenteric glands containing pus, from a native private in the Royal African Corps, who died of yellow fever." By Dr. McDiarmid. This drawing represents the anatomical characters of typhoid fever, and *proves*—1stly. That typhoid fever occurs on the coast of Africa, presenting there the same lesion as in France, England, and America; and 2ndly. That more than one disease is confounded under the term "yellow fever." When noticing Dr. Bryson's work, we expressed a hope that future writers on this subject would detail cases at length, by which we might form our own judgment of the accuracy of their deductions, instead of simply giving us their own often vague general conclusions.

The preparations of the colon illustrate very well certain forms of dysentery; ulceration commencing around the solitary glands; in the glands themselves, as was first shown by Dr. Parkes, in his work on "Dysentery;" and in the mucous membrane, apparently altogether independent of the glands.

The Poor Artist; or, Seven Eye-sights and One Object. Science in Fable. 1850.

We are not wandering out of the legitimate path of professional science in noticing this charming little volume, inasmuch as it may be regarded as a romantic and exquisitely drawn fiction, illustrating the different impressions which one object will convey when viewed through organs of vision differently constructed, according to the physical constitution and habits of different creatures. There is no fable in La Fontaine more ingeniously conceived, or more gracefully detailed, than this; conveying a moral which, were it only applied in social life, might reconcile us to those differences of opinion which must necessarily arise from different mental idiosyncrasies. The author introduces to us a poor artist, who, not enjoying the "value of a name" in the commencement of his career, goes on "struggling in vain with ruthless destiny," meeting only with withering disappointment; until, going forth into the woodlands, he yields in despair to that dreamy lassitude, in which the half-conscious attention gives way to "the visions which arise without a sleep." The artist then listens to the imaginary conversation of seven insects, each belonging to a different species, giving a different, and each a poetically-graphic description of the same object of perception. When Swift wrote his "Gulliver's Travels," he was very careful, we are informed, to maintain correct proportions between the comparative sizes of the different objects he described, as appearing to the Lilliputians and Bobdignagians, according to the relative difference of their stature. The insect tribes, and indeed every species of animal, inarticulate or articulate, must, as our philosopher observes, see the self-same object, not only differently but sometimes with extraordinary difference. He may, therefore, well inquire, "How do we appear to these our dumb companions in the world?" This indeed is a curious problem. "Who knows," says Montaigne, "whether my cat is not more amused with me than I am with my cat?" The poor artist having awakened from his reverie, shakes off his despondency and achieves a triumph; but his great cartoon is subjected to the same inexorable law, and conveys impressions so different to six different individuals that their criticisms might have prostrated his moral energies had he not fallen back upon the physiological principle previously enunciated. "Yes," ejaculated he, "I feel persuaded that scarcely any two individuals, even of the same species, see the same thing alike. At any rate, it is evident that this is the case with the human species. Whether this infinite variety be caused by some degree of difference in the organs of sight, or in the respective minds, or by both those causes, the fact of the difference is demonstrable, and not only in the present instance; but the more one thinks of it the more one sees this throughout the affairs of life on any *special* occasion which brings the question to the test. In general there is (very fortunately) no need to examine the difference, and we find it convenient, if not almost necessary, to agree, in order to let the affairs of life proceed with some show of a mutual understanding; especially as we always take it for granted, *so long as we are let alone*, that everybody sees a thing just as we see it."—P. 219.

The volume opens with a dedication to Professor Owen, which is expressed with much good taste and feeling; indeed, the poor artist succeeds in bringing some of the most recondite points of science home to human sympathy, and consequently this little work cannot fail to be read with deep interest. In point of style and diction it is beautifully written, and evinces a taste and refinement, and at the same time a strength and integrity of purpose in the argument which cannot fail to be appreciated.

An Introduction to the Study of the Mind; intended especially for the Senior Classes in Schools. By Daniel Bishop. London: Longman and Co. 1850.

This is an amiably-written, well-intentioned little work, but by no means adapted to supply a disideratum which certainly exists, viz., that of an elementary introduction or key to the study of those authors who, both at home and abroad, have written so ably on the philosophy of the human mind. We do not remember to have met with the name of the Author, Mr. Daniel Bishop, before, in connexion with any metaphysical investigations; wherefore, we ought not, perhaps, to be surprised at finding him, as he conducts us to the vestibule of his own temple, stumbling upon its very threshold. He sets out with the following startling asseveration:—"The reader need not be told, that we have the microscope to see that which without it is invisible. The telescope enables us to penetrate into space. The electric telegraph conveys intelligence with a rapidity scarcely conceivable. Our ships go not only to every accessible part, but beyond even the habitable limits of the globe. The steam-engine

and the printing-press achieve wonders unheard of until modern times. Notwithstanding these marvels, a greater wonder remains to be noticed. *The writer believes that, amongst all the labours of the learned, there is not to be found any work that developes the laws which regulate the rise and succession of thought.*" Where, on earth, could the aforesaid Daniel Bishop have been born? Where could he have been educated? Did he never, among the ancients, hear of such men as Socrates, Plato, Aristotle, Epicurus, Plotinus? Did he never, by accident, stumble upon the philosophical works of Bacon, Hobbes, Cudworth; or hear of Locke, Berkeley, Hume, Reid, or Dugald Stewart? Did he never, crossing the Channel, pick up some myth or other about the Cartesian system, or the pre-established harmony of Leibnitz; or Kantism or Anti-Kantism; to say nothing of Condillac, Gassendi, Malebranche, Ampère, Cousin in France, or Jacobi, Reinhold, Herder, Fichte, Schelling, Hegel in Germany—a "starry host" of philosophers, all of whom have laboured—and not without success—in unveiling many of the laws which govern and predominate in the intellectual world? *Aliquandus bonus dormitat Homerus,*—and surely this excellent philosopher has been in a state of profound chloroform, oblivion, or mesmeric coma. However, he does eventually awake, like Bottom, the weaver, after having had "a most rare dream," and begins philosophising — we should rather say, soliloquising — upon these matters; scornfully disregarding the authorities that preceded him. The "*divinus afflatus*" in poetry, we can form some conception of; but no man now-a-days can go through a process of inductive reasoning by sheer intuition. Hence we are not surprised to find our philosopher puzzling his brains about matters he cannot comprehend, and dogmatising as follows respecting the origin of our ideas:—"Every one," quoth he, "must be sensible that *ideas* and *trains* of thought are continually passing through his mind. All our thoughts necessarily proceed from *something extrinsic* or *intrinsic*. From the first arises the perception of ideas. In the second the action of the *will* produces their *connexion.*"—(Page 5.) This we presume to be a round-about, or, what my uncle Toby irreverently called "Cock-and-bull way of telling a story," or describing what Locke so succinctly explains to be the twofold origin of ideas, viz., those derived from the sensible qualities of external objects—ideas from *sensation;* and those derived internally from the operations of the mind itself—ideas from *reflection.* But our author wanders *toto cœlo* from the point, when he argues that this second class of ideas, originating intrinsically, spring not out of the laws of the understanding, but out of the WILL; for the will, be it observed, is obviously the *result* of a certain antecedent concatenation of ideas. We might, however, write a separate monograph on every sentence propounded in this little book, so easy is it to enunciate equivocal and fallacious aphorisms upon subjects of the most profound philosophy. Still it is altogether as we have premised,—amiably written and well intended. The author contemplates human nature under its brightest aspect; and every page is liberally interlarded with scraps and quotations from Scripture, which, by the way, are very unnecessary. We have no inclination, however, to be censorious. We should be glad if we could only recognise in his volume the very smallest star to guide us through the obscure labyrinth in which, ever and anon, the author clumsily loses himself. There is such a thing as playing at blind-man's buff with philosophy; and, in this game, children of a larger growth are apt to make themselves look very ridiculous. In the next edition we should recommend Mr. Daniel Bishop to leave out all his own metaphysical reasonings, and preserve all the Scripture passages; whereby he may render his "Introduction" of some use in those schools, for which, we learn by the title-page, it was "especially designed."

METROPOLITAN SANITARY ASSOCIATION.—At a late meeting of the General Committee of this Association, it was resolved, that the Association would, during the parliamentary recess, endeavour to obtain, during the next Session, an Act for the improvement of the dwellings of the poor; for the repeal of the Window-tax; an Act to provide an improved supply of pure water to the metropolis; an amendment of the Nuisances Removal and Contagious Diseases Act; and that the Association would shortly hold public meetings, and appeal to the public for support and aid.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ON A CLEAR SOMEWHAT METALLIC PERCUSSION-NOTE (*SON HYDRO-AERIQUE*) OCCURRING IN PLEURITIC EFFUSIONS.

Two interesting cases are reported by M. Notta, (Membre de la Société Médicale d'Observation,) in which an extremely clear percussion-note, not exactly tympanitic, or similar to the note in pneumo-thorax, but more like that given by a stomach containing both air and liquid, occurred at the anterior part of the thorax. In the first case so copious a pleuritic effusion had occurred that there was absolute dulness of the whole of one side. As this began to be absorbed, while the note under the clavicle continued perfectly dull, at a short distance below, at the upper part of the mammary region, a clear metallic note was brought out on percussion; while below this point there was again perfect dulness passing into the hepatic dulness. No change in posture altered the position of the clear note. At this point inspiration was feeble; expiration prolonged and blowing. Five days afterwards the infra-clavicular region was much clearer; and ten days after this was nearly as clear as the corresponding point on the other side. The sonorous region was less clearly defined, and the note had lost its marked character: the respiration in both places was nearly normal; dulness still existed in the depending portions of the pleural cavity. The patient did not cough or expectorate, recovered his strength, and left the hospital. Referring to the possible causes of such unusual sonoriety, M. Notta enumerates three: 1. A vast cavity with thin walls; 2. pneumo-thorax; or 3. The vicinity of an air-holding cavity like the stomach. The first explanation was inconsistent with the other symptoms. The third was manifestly insufficient; and M. Notta rejects the idea of air in the pleura, produced either by rupture or by actual secretion from the pleura, because in such a case the clear sound should have been at the summit of the lung. He suggests, therefore, whether a portion of lung may not have been floated up to the point where the clear note was given on percussion, and have been retained there by adhesions. He thinks it possible that a portion of lung, thus placed, containing air, and surrounded by a layer of liquid, might give rise to this clear sound, rather than to the ordinary pulmonary percussion note. The second case supports this explanation, by a *post-mortem* examination. A rapid pleuritic effusion on the left side (immediately consequent on aneurism of the aortic arch pressing on the lung) gave a dull note over the entire left side; three days subsequently, at a point in front, two finger breadths below the clavicle, where there was dulness, a clear note was found, while below this there was again dulness. After death, the lung was found pressing against the parietes, at the place where the clear note was given, being supported in the position by the large aneurism.—*Archives Gén.*, Avril, 1850, pp. 422—437.

[We have frequently observed an extreme sonoriety (not a tubular note) at the summit of a lung compressed in its inferior portions by fluid or solidified by pneumonia, since our attention was directed to this phenomenon by a passage in Skoda. The same physical conditions would be present here as in M. Notta's cases; and, possibly, it may be some analogous cases which have led some excellent observers to contend for an actual secretion of air into the pleural sac as an occasional accompaniment of a pleuritic effusion.]

COLLODION IN INFLAMMATIONS OF THE SKIN.

For many years M. Robert Latour has employed in the treatment of erysipelas, phlegmon, variola, herpes zoster, and eczema, a strong solution of gum spread over the affected part, so as to defend it from the influence of the air. He has lately used collodion in the same way, and reports most favourably of the effect which is thus produced. — *Arch. Gén.* Avril., p. 493.

RICORD'S "TUMEURS GOMMEUSES" OF THE LUNG.

In answer to a question put to him at the Académie, by M. Robert, as to the anatomical characters of his "gummy tumours" of the lung, Ricord gave the following description:—The tumour commences in the cellular tissue, and offers always the same characters. It is at first a small

nucleus, which increases and hardens, and is of a grey colour; it contracts adhesions with the surrounding part, and finally softens from the centre to the circumference, not by suppuration, but by a kind of organic detritus. It then heals rapidly.—*Arch. Gén.*, Avril., p. 499.

RESPIRATION IN PLEURISY.

In a very interesting discussion at the Académie on paracentesis thoracis, M. Beau made the following statement in respect of the differences of respiration which occur in cases of pleurisy. It is well known that in pleuritic effusions there is sometimes respiratory murmur or bronchial respiration, while in other cases it is absent. M. Beau believes this to depend on the nature of the effused products. When the effusion is completely liquid, there is bronchial breathing, because the liquid transmits the sound almost as well as the hepatized lung.(?) If these are false membranes, and especially if these are thick, soft, and in great quantity, the bronchial respiration is not heard. It has been stated, that bronchial respiration occurs as the effusion augments; but M. Beau believes the fact to be exactly the reverse.—*L'Un. Méd.*, Juillet 2.

ALKALINITY OF THE BLOOD.

In a memoir presented to the Academy by M. Cahen, and which has been referred to MM. Caventon, Lecanu, and Martin Solon, the following statements are made :—

1. In the healthy state the serum holds in solution a substance which passes afterwards into albumen and fibrine.
2. Albumen and fibrine can be artificially transformed into each other.
3. Fibrine in presence of a dilute solution of soda at a temperature of 100 (Fahrenheit), transforms itself into albumen, or at least remains dissolved.
4. In inflammations the fibrine is augmented, the albumen is diminished, and the augmentation of the one is proportioned to the diminution of the other.
5. The serum in such inflammations is less alkaline, and the augmentation of the fibrine is due to this circumstance, as it no longer transforms itself into albumen. A small quantity of soda restores the normal relations.—*L'Un. Méd.*, Juillet 4.

SUBSTITUTE FOR QUININE IN INTERMITTENT FEVERS.

A new salt, the "hydroferrocyanite of potash and urea," (!) has been discovered by a M. Baud, who announces in *L'Union Méd.*, (Juillet 6,) that it is far more efficacious than quinine in the treatment of all malarious diseases. He has tried it largely, not only on endemic cases, but on soldiers invalided from Africa. Two hundred cases have been thus treated, in many of which quinine and arsenic had failed, and the majority have been cured. The Editor of *L'Union Méd.* states, that M. Baud is worthy of all confidence.

ENCYSTED BRONCHOCELE.

The following description of this disease has been lately given by Beck :—In the healthy thyroid gland of man, it is well known that there is a cellular envelope which sends prolongations into the interior of the gland, and forms thus a kind of stroma, which encloses the vascular and nervous branches, and the various compartments of which contain the characteristic elements of the thyroid body, viz., the peculiar glandular vesicles. These vesicles are composed of an enveloping membrane, and contain granules of various size suspended in a certain quantity of fluid; these granules are not, as supposed by Simon and Ecker, attached to the surface of the membrane, but are free in the interior of the cell. In goitre the peculiar vesicle undergoes various transformations; the granular contents disappear; a gelatinous mass, like white of egg, distends the vesicle; the cell-membrane is absorbed, and lacunæ of variable size are left, which are filled by a viscous fluid. This is the "lymphatic goitre." If the transformation continue, these lacunæ enlarge; the interstitial tissue is thrust aside; the vessels are ruptured; a common cavity, filled with a viscous fluid, mixed with blood, is the result; and the "cystic goitre" commences to be formed. Under the microscope the viscous and bloody mass presents the following elements :—1. Serrated blood-corpuscles; 2. Transformed and agglomerated blood globules, (inflammatory globules—exuda ion corpuscles?) 3. Fatty corpsules. 4. In cysts, cholesterine. Beck has never seen what Ecker described, viz., a membrane round the aggregations of the blood particles, and asks how it is to be supposed that a membrane could form round blood particles, which are simply mechanically aggregated, transformed, and wasting. In other cases a singular change occurs. From some cause some of the vessels of the gland become distended, burst, and give rise to apoplectic effusions; at the same time other vessels pour out plastic exudation; the walls of the apoplectic depôt become smooth and transformed into a cyst. In the interior of such cysts are often found fibres, concretions, hardened masses, aggregated blood globules, and incomplete grandular vesicles. In other and older cases, however, the aggregated blood globules disappear; fibres of areolar tissue form; new vessels appear, and, finally, new vesicles similar to the normal thyroid cells are formed, which gradually fill the cyst, and constitute a second thyroid body in the centre of the parent gland.—*Arch. fur Phys.* Heilk. 1849. 2nd Heft.

SYPHILIS IN ANIMALS.

The highest authorities have always considered syphilis as a disease peculiar to man, and incapable of being communicated by inoculation to animals. Hunter and Ricord were both of this opinion. In 1844, however, M. Turenne informed the Academy of Sciences that he had succeeded in inoculating a young monkey, and even presented the animal to the Surgical Society. The medical public ridiculed the assertion, and, even so late as the present year, M. Ricord professed his belief that it was impossible to transmit the malady to animals. M. Turenne, not discouraged, continued his experiments. On the 5th of June last, some virus was obtained from Ricord's hospital, and a monkey inoculated with it in presence of several members of the German Medical Society of Paris. Ulceration was soon produced, and, to test its nature, Dr. De Welz, *agrégé* of the Medical Faculty of Wurzbourg, resolved on inoculating himself with some pus taken from one of the sores on the monkey. This was done on the 9th of June. On the 13th, M. Ricord examined the sore produced, but declined pronouncing on its nature. On the 14th, M. Ricord himself inoculated Dr. De Welz a second time, and, on the 15th, recognised the first sore as a true venereal chancre. On the 18th, the characters of the sore were so well marked, that M. Ricord presented M. De Welz to his class, confessing that the experiments of M. Turenne had fully confirmed the fact of transmission to animals. MM. Velpeau, Cullerier, and other medical men, examined the sore, and agreed that they were true chancres. The question, then, appears to be decided. —*Gazette Médicale*, July 20.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

MORTALITY OF PARIS.

The population of the city of Paris is something under one million. A careful registration of births and deaths is kept at the different municipal offices, but hitherto no weekly or monthly publications of mortality bills, similar to those which issue from the office of our Registrar-General, have been made. The following brief notice of the mortality in Paris during the past week, may therefore be interesting as a point of comparison with that of the British capital :—

The total number of deaths was 576; 278 of men, 298 of women. About 79 persons, therefore, die daily. In London the average mortality is 123 daily, considerably below that of Paris, when the relative populations are considered. The following are the principal diseases which proved fatal. The corresponding numbers from the London mortality bill of last week are placed beside them.

	Paris.	London.
Phthisis	89	141
Pneumonia	56	45
Bronchitis.	30	35
Typhoid Fever.	14 (Typhus)	39
Apoplexy	20	25
Measles	11	26
Croup	8	0
Convulsions	7	30
Born Dead	46 (average)	20
Suicide	8	0

A glance at the above figures will show that the chief causes of mortality, viz., diseases of the respiratory organs,

are the same, and hold the same rank, in both capitals; yet, notwithstanding the more favourable climate, they are more frequent and fatal in Paris than in London. On the other hand, there is a striking difference in the mortality from fever, which is much less in Paris; although the poorer classes unquestionably enjoy smaller degrees of food, light, air, and other comforts which are said to be preservatives against fever. The only way, perhaps, to reconcile the difference is to admit with Dr. Jenner that the causes giving rise to the development of typhus and typhoid fever are different. Were they one and the same we should certainly have a much greater amount of typhus here, and a weekly mortality from fever higher than fourteen.

MESMERISM.

But why think of death, talk of mortality, or imagine, as our foolish forefathers did, that the grave forms an impassable barrier between the living and the dead. Mesmerism, like malt liquors, has its degrees, and we now have here a a triple X lady of most extra lucidity, who undertakes, not merely to see round a corner, through an iron pot, or from one pole to another, but into the next world, *s'il vous plait*, and holds most delightful conversations with your deceased parents, communicating their wishes, and enlightening you with their counsels. Yet people will tell you "there is nothing new under the sun." Did Solomon ever dream of such a thing as this?

ANALYSIS OF THE BLOOD.

In my last letter I mentioned one or two facts contained in a paper presented to the Institut by MM. Verdeil and Dolfus. These gentlemen spoke of a new acid which they had discovered, analogous to those derived from the oxidation of sugar, and forming a crystallised salt with the oxide of copper.

M. Mialhe is inclined, from his own experiments and researches, to conclude that such an acid really exists. It probably exhibits the characters and composition of one of those acids produced by the respiratory oxygenation of sugar; for M. Mialhe has already demonstrated that amylaceous substances, being converted during digestion into saccharine matter, are subsequently transformed by the alkalies of the blood into acid compounds, such as formic acid, koli-glucosic acid, and ulmine. These are the only substances capable of reducing the oxide of copper—a power which has been thought confined to grape sugar.

SCOTLAND.

Since the British Association left us, Edinburgh has fallen into its usual state of autumnal quiet. There is hardly an epidemic of any kind prevalent. The number of cases in our infirmary, which for some weeks past has been near the minimum, is still on the decline. Even fever, which, from the influx of labourers for the harvest, usually begins to increase at this season, still remains at a low figure. For Scotland, the weather has been uncommonly fine during some time past,— warm without excessive heat, and dry without an absolute dearth of rain. Hitherto the complaints connecting themselves with the state of the weather have been cartarrhal affections, sore throats, and rheumatic pains, from exposure to currents of air when the body has been much heated. Ere long we may expect bowel complaints (which already threaten) to rise above the average of common autumns; for these are generally early and severe with us in proportion to the warmth of the weather. It will not be surprising if some of our cases of bowel complaint proceed to such severity as to raise an alarm of the recurrence of Asiatic cholera.

A wretched man, Bennison, an Irishman, was executed here last week, for poisoning his wife with arsenic. He was found guilty of bigamy and murder; and circumstances came out on the trial indicating a strong suspicion that he had made away with his first wife. What adds to the enormity of the case is, that he had attached himself to Wesleyan Methodism, was a great pretender to sanctity, and, at the time he poisoned his wife, was evidently courting a young woman, under pretence of affording her religious instruction. In a medico-legal point, the trial did not present anything very remarkable, with the exception of the sudden death of two dogs in the immediate neighbourhood, simultaneously with Mrs. Bennison's death, the cause of their death not being distinctly made out. As usually happens in such cases, the culprit was proved to have purchased arsenic, under pretence of poisoning rats; the woman died after an illness of something near eight-and-forty hours; suspicious circumstances were shown to have attended his conduct during her illness; she was buried hurriedly; he refused his consent to the body being opened at the request of the deceased's sister; and the grounds of something being wrong at last became so convincing, that Bennison was apprehended and the body exhumed. Arsenic was unequivocally found in the stomach and liver. Arsenic could not be detected in the bodies of either of the two dogs; and this, in a case where the evidence was to be purely circumstantial, seemed likely to create some difficulty, because the sudden death of the dogs was one of the incidents which originally most strongly led to the idea that poison had been the cause of the woman's death. To one of the dogs which belonged to a neighbour, Bennison, on the second day of his wife's illness, had brought a plate of cold potatoes, which the dog ate, and was then let out into the street. Four hours after, in the evening, the dog returned, and in an hour and a half began to moan, and next morning was found dead; the particulars as to the other dog were not given on the trial. The only explanation that can be given of the difficulties connected with the dogs is, that there was no arsenic in the potatoes given by Bennison to his neighbour's dog; but that this dog, just before returning to his master's house, had eaten up some of the matters vomited by Bennison's wife, which, by his direction, had been thrown out the evening before, that the other dog had been poisoned in the same manner, and that, owing to the violence of the vomiting produced in the two dogs, the whole of the arsenic had been discharged from their stomachs. Before execution Bennison confessed that he had administered arsenic to his wife in porridge.

Notwithstanding the enormity of this man's guilt, several petitions were got up for a commutation of his sentence. What would mercy to such a monster be, but a premium on crime? Such petitions, however, show that the chief part of the outcry against capital punishment is founded merely on a senseless sentimentality; for what person of common judgment could think for a moment, that to pardon such a man, while the law still retains the penalty of death for murder, could have any other effect but to instigate to crime. We observe, in a recent case, tried at the Oxford assizes, a jury convicted a woman of deliberately poisoning her husband with arsenic, in order to marry another man, and most consistently recommended her to mercy.

IRELAND.

PARISIAN SURGERY IN DUBLIN.

A case of cataract, lately operated on in Paris, and made "much ado about" in one of your contemporaries, has stirred the bile of our Dublin ophthalmologists. It was lately stated, it seems, with somewhat of a flourish of trumpets, that the celebrated M. Velpeau now prefers couching to extraction. In the latter operation he has been successful, too, but in the former he has discovered that the operation is only diminished in value by some slight flakes, not unlike a "lattice blind half open," remaining in the field of vision after operating. If concrete, he says, these belong to the crystalline lens, and are easily absorbed, but in other shapes belong to the capsule, when their absorption becomes more difficult,—all matters, according to our Dublin authority, known to students of a single year; it being the rule rather (demonstrated in Ireland a thousand times), that shreds and flakes of the lens should remain after operation, and scraps of the capsule become opaque; all, however, easily removed by care. The interesting part of the communication, however, like that of many letters, is in the postcript. The writer wishes to communicate to M. Velpeau (perhaps through the able and excellent correspondent of the *Medical Times* in Paris, the chief medium of the profession with the continent) the important fact, that in Dublin more cataracts are cured by simple *absorption* than by either extracting or couching. (a)

CHLOROFORM IN MIDWIFERY PRACTICE.

Several corroborative proofs of the value of chloroform in

(a) We think Mr. Blacklock of Dumfries could supply some important data upon the absorption of cataract.—Ed. *Med. Times.*

midwifery practice have been just added to those of Denham and Murphy by Dr. Beatty. Few, if any, of our modern innovations, perhaps, have had such a "cloud of witnesses" in its favour as the anæsthetic of Dr. Simpson; and yet we are told it has already fallen into something like disuse at one of the chief London hospitals. Dr. Beatty is of opinion, that the immunity from danger in midwifery practice depends on the *horizontal* position of the patient,—a point not, perhaps, duly attended to in those surgical cases that have ended fatally. He also dwells particularly on the necessarily *empty* state of the stomach in protracted labours, by which anything like pressure on any of the main vessels, during insensibility, is prevented,—a point also, perhaps, not attended to sufficiently in ordinary practice of operations. Beatty's experience of chloroform in labour has been most satisfactory, — no bad effects whatever following its use. In ordinary labours it is most valuable; in tedious labours, produced by sluggishness of the uterus, the first effect is the arrest of the uterine action for a short time. This would seem to contra-indicate its exhibition; but he has found the indication at once removed by giving, a little before the chloroform is expected to act, a sufficient amount of ergot of rye, when all goes on quite well. He gives several most satisfactory cases, in which both remedies seem to act, each irrespective of the other. It was curious that in many of the cases the patient was sensible of the effort which should give pain, but felt none—the ganglionic, or, shall we say, the "reflex" system acting vigorously, the central parts of the nervous system apparently at rest. Everything, Dr. Beatty thinks, depends on the *purity* of the chloroform and the ergot of rye.

And *apropos* of this subject, one of increasing interest to the Profession,

THE ADULTERATION OF MEDICINE

seems to be carried on at present in a systematic mode, sufficient to destroy all our best concerted plans of treatment. A singular account of this is given in the *Quarterly*, by some one evidently acquainted with the performances of our large houses. The following, "from his private note-book," is intended for his friends, the trade just now, he facetiously states, "being a most lucrative one." The trade seems common to both sides of the Channel—Liverpool and Dublin.

Oxide of zinc is adulterated very commonly with sulphate and carbonate of baryta and Dutch lead, the latter previously adulterated with a substance still cheaper—plaster of Paris. Nitrate of silver consists precisely of four parts of this very valuable salt, and one part of nitrate of potash, ("villanous saltpetre.") Balsam copaibæ is nothing but castor oil with a dash of the true balsam. White precipitate (amiduret of mercury, &c., of Kane) is usually made up of carefully precipitated carbonate of lime (chalk) exactly one part, and white precipitate one part. Hydriodate of potash is hydriodate potash six parts, common salt one part, and carbonate of potash half a part. Sulphate magnesia is Glauber's salt in small crystals,—no attempt at mystification. Tartar emetic is almost always sulphate of potash and tartar emetic, (the latter of course, by some mental process, also considered pure,) of each equal parts. Calomel is, (mind don't go astray,) 1st, for the Western States of America, "carbonate of lime 9 parts, pure calomel three parts;" 2ndly, for the Eastern States, "pure calomel one part, carbonate of lime three parts."

Kermes mineral (latterly considered an antidote to strychnine,) is red ochre, potato starch, lamp black, Prussian blue, of each according to the "chromatic scale" and fancy of the particular druggist. Of pure kermes just *none*. Oh ye unhappy persons poisoned by nux vomica!

Lactate of iron, as might perhaps be expected, is sugar of milk and sulphate of iron of each *quantum sufficit*. Of lactic acid or simple oxide just *none*. Opium is that drug carefully washed to get out the morphia, made up again as good as new, with sundry leaves, &c. Real Turkey rhubarb much the same rhubarb exposed to spirit. Quina and morphia fare little better. The former consisting of sulphate of lime carefully prepared in needles, and salacine a due quantity; quinine itself ditto.

Such falsifications are sufficient to destroy the entire practice of medicine as an art. In Germany we are told such a state of things is impossible. In this country, however, every sort of favour is shown to quackery, and to such adulteration as the foregoing the government merely say *caveat emptor*. The sooner the profession put their shoulders to the wheel the better, and strive by some new Act to make such things punishable. A good beginning has been made in the petition to the House of Commons, respecting the adulteration of milk. Let it be vigorously followed up by one against the adulteration, much more heinous, of our ordinary medicines.

THE "DUBLIN QUARTERLY."

The August number of the *Quarterly* duly made its appearance. In common with the mass of the public, the *Medical Times* must have regretted the late trial in the courts in Dublin anent this journal and its late able and gifted editor. The present number is an excellent one; the "Report of the Cork Pathological Society" alone shows what good materials we have in the "far west," in the city of Maclise and Father Prout, if only an opportunity were afforded for exercising them. The other papers are also of much interest. In a review of Mr. Orr's "Surgery," this author is taken to task a little for leaving out Dr. Wilde's labours in the ophthalmological world; and we are glad to find such graceful reference made to the merits of Dr. Wilde. Dr. Wilde's additions to this department of our knowledge have been one of the chief features of the past numbers of this journal.

SUNDERLAND.

In Sunderland, a now large and important seaport town, I am glad to report the establishment, upon the basis of a previously existing library, of a medical society, comprising nearly all the practitioners of the neighbourhood.

Sunderland has, on more than one occasion, been peculiarly notorious for its epidemic visitations, Asiatic cholera having, on one or more occasions, entered the kingdom by the Wear; and this, together with the large field of general practice, must supply the Medical Society with subjects of interest for reflection and discussion. During the last season, and pending the visitation of cholera, papers were read, most valuable as the records of immediate experience, and I trust soon to be able to report evidence that in the provinces the professional mind is at work. It is somewhat painful to reflect that the immense amount of valuable practical information, derived from the thousands of cases of interest which must be perpetually occurring in the provinces, is unrecorded and lost; while it might be the privilege of these professional associations to transmit abundance of that experience so valuable to all. The Sunderland Society numbers upwards of thirty members, possesses a rapidly accumulating library and reading room, and will, it is confidently hoped, be as prosperous as it deserves.

GENERAL CORRESPONDENCE.

PROFESSOR LIZARS ON CHLOROFORM.

[To the Editor of the Medical Times.]

Sir,—In answer to your Editorial remarks in the *Medical Times* of the 13th ultimo, on chloroform and the "Edinburgh chatter about it," I take the liberty to inform you, that there was a time when "all surgical knowledge did emanate in an unceasing current from the Northern metropolis." In those days, the advancement of medical science, and the maintenance of professional and personal character constituted the end and aim of all their exertions, and embraced the objects to which the labours and writings of John Bell, Liston, and others were unceasingly directed, and on the accomplishment of which the undisputed claim to their great posthumous reputation deservedly depends. But, *tempora mutantur*, these ornaments to the profession could never have stooped to the unworthy empirical practices to which you refer, so systematically pursued at the present day by a certain class of the profession in this city, who would be leading men on their own pretensions—a class who are as *show trumpeters* to their own *caravan performances*, whom you have so truly characterised as exercising the degrading calling of "circulating letters, upon every possible occasion, in the daily papers, or in periodicals like *Chambers's Edinburgh Journal*, explaining, with infinite modesty, how all surgical know-

ledge emanates from the northern metropolis." John Bell has graphically described the miserable machinations of these learned quacks; and to his judicious and sarcastic remarks I beg to refer your readers.

In London you have the power, and exercise the liberality and the manliness, of publishing the result of the cases which occur in the hospitals, while here they are consigned, as C. Bell says, to the tomb of all the Capulets. Again, in Scotland there is no coroner's inquest, otherwise many of these *pure* gentlemen would have been *pulled up*. I regret that Mr. Cock, of Guy's Hospital, and several surgeons, "have openly expressed their disapprobation of the continuance of the practice of administering chloroform." They have only to attend to two important points, to which I have particularly adverted in the *Medical Gazette* for June 8, 1849, in order to ensure safety to the patient. The first indication is, to give directions to the patient, that his stomach be kept empty; and the second, that atmospheric air be breathed freely along with the inhalation of the chloroform.

In the *Gazette*, I observe, "when using chloroform the patient should have an empty stomach, and for that reason operations should be performed before breakfast, as chloroform always produces vomiting when the stomach is full, and *the rejected fluid is liable to enter the paralysed glottis and produce suffocation*. To this cause I apprehend the great proportion of those who have died under the use of chloroform may be ascribed." On more than one occasion I have noticed, when the dentist was extracting the molares of the lower jaw, (of patients under chloroform,) that the blood trickled down the glottis, and threatened suffocation, and that only by the timely holding the head forwards has death been prevented. It may be fairly asked, how many have died under the hands of the dentist during the administration of chloroform from such a cause? In veterinary surgery, the horse is allowed no food or water for many hours before inhaling chloroform. (a)

The second point to be attended to is the allowing the patient to breathe atmospheric air along with the chloroform. In the *Gazette*, I state, that "an experienced assistant is required to administer the chloroform, and to do nothing else. He must watch its effects, allowing fresh atmospheric air to enter the nostrils and mouth occasionally during its administration and influence, otherwise the blood may become too greatly carbonised, and death ensue." "A silk pocket handkerchief, folded about eight inches square, and rendered hollow like a cup, with two drachms or so of chloroform poured into the centre, is to be applied to the nostrils and mouth," &c.

In veterinary surgery an instrument seems indispensable for the administration of chloroform to horses; an ingenious one for that purpose, invented by the late Mr. Ramsay, of Barnton, will be found depicted in the *Scottish Agricultural Journal* for July, 1849. But in human surgery no inhaler or any instrument should ever be used; it is highly reprehensible,—many lives must have been sacrificed by its employment.

From what I have stated, it is evident that I consider chloroform to be a valuable auxiliary in surgery, especially in some of the capital operations,—such as lithotomy. I remarked in the *Gazette*, that "under its influence, the patient is rendered, *pro tempore a cadaver*, and, if the surgeon be perfectly master of the anatomy of the parts, he is, as it were, performing a dissection in the anatomical rooms." But in minor operations, as the amputation of a finger or toe, I am of opinion that it should be dispensed with, and the inhaling of chloroform, in all cases, ought to be left to the choice or decision of the patient. I commenced its use with prejudice, but have now become a thorough convert to its utility, and have used it in amputation of the extremities, excision of the mamma, hernia, luxation of the joints, lithotomy, &c.

Velpeau, and some of the French surgeons, indiscriminately condemn its employment in all operations, but, in my mind very erroneously, for, is there any operator who does not acknowledge, that he can perform every surgical operation on the *cadaver* much more dexterously than on the living body? From what I have stated in reference to the extraction of the molares of the lower jaw, it must be obvious, that the use of chloroform is not unattended with danger in operations connected with the glottis, such as staphyloraphy, &c.

(a) See *Scottish Agricultural Journal* for July 1849.

Dr. Robert Barnes, of London, condemns its use in parturition, and even in surgery. "In parturition as in surgery, in physiology as in pathology," says he, "the physical shock of nervous excitation or injury cannot be escaped from. In parturition as in surgery, the emotional shock of nervous excitation or injury may be avoided. In surgery this may be an invaluable boon." Now, I contend, that if chloroform be *judiciously* administered, this boon is obtained. In lithotomy the patient feels no pain, is unconscious that the stone has been abstracted from his bladder, but the bladder acts and contracts during the operation, proving that the ganglionic system of nerves remains functionally unimpaired, while the brain and spinal system are temporarily paralysed. In hernia the constricted portion of the muscle is paralysed, but the peristaltic action of the intestines continues. In the administration of chloroform I have stated, that the constant production of retching proves that the pneumo-gastric nerves are excited.

In veterinary surgery the horse lies in a state of stupor, while the most painful operations are performed, and I am not aware that any fatal result has occurred, when the apparatus of the late Mr. Ramsay was employed.—I am, &c.,

John Lizars,
Late Professor of Surgery to the Royal College of Surgeons, and Senior Operating Surgeon in the Royal Infirmary, Edinburgh.

Edinburgh, 38, Charlotte-square, Aug. 12, 1850.

DR. MACLURE AND MR. SYDNEY BERNARD.

[To the Editor of the Medical Times.]

Sir,—In one of the medical journals of last week I see an allusion to the late lamented Sydney Bernard, and therefore, on the principle of rendering unto all their dues, I take the liberty of forwarding to you the following statement. Of the facts contained in it I have myself been aware for some years, but did not feel myself at liberty to make them public, because my informant (who had himself only learned them by hearsay) objected to my mentioning his name. Having, however, since met with a naval officer, who was well acquainted with both the parties concerned, I beg to state, on his written authority—1. That (contrary to the usual belief) Mr. Sydney Bernard did *not* volunteer his services on board the Eclair at the time of the fever, but that he went on board at the command of his superior officer; and 2. That Dr. Maclure *did* offer *his* services voluntarily, being at the time a promoted full surgeon on half-pay, and entirely at his own disposal. Both did their duty to the sufferers nobly, and both fell victims to their exertions; but it does not seem right that the admiration due to voluntary self-devotion should any longer be bestowed on the wrong individual. As I was myself totally unacquainted both with Mr. Bernard and Dr. Maclure, you will readily believe that it is with no personal object in view that I make this public statement. I enclose my name as a guarantee for the authenticity of this communication, and my informant has given me permission to disclose his name if it be necessary for authenticating his statement.

I am, Sir, your obedient Servant,
August 16, 1850. M.D.

PRESENT CONDITION OF THE LYING-IN HOSPITALS IN VIENNA.

DR. LIGHTFOOT IN REPLY TO DR. ROUTH.

[To the Editor of the Medical Times.]

Sir,—Whilst preparing my Memoir on Puerperal Fever, read by me some time ago to the Westminster (now London) Medical Society, and subsequently published in the *Medical Times*, my attention was directed, through the medium of a Medical Quarterly Review, the *British and Foreign*, I believe, to some extraordinary and really startling remarks communicated by Dr. Routh to the Medico-Chirurgical Society in London, and published in their "Transactions," as to the present condition of the Lying-in Hospitals of Vienna; the malpractices he had observed there; the frightful mortality occurring in one of the hospitals, and which had escaped the notice of the government and the profession; in a word, to a condition of things which I, and I believe most of your readers, could not have conceived possible in a city, boast-

ing, as Vienna once did, of the most illustrious Medical School in Europe,—where Prochaska, Mascagni, the Wenzels, and a host of other great men, once taught and practised.

Struck with the extracts made from Dr. Routh's paper, I took the liberty of adverting to some of them in my memoir, not doubting their accuracy. I regret not having had then, nor since, leisure to refer to his original memoir; and, now that Dr. Routh has explained in his letter to you the very imperfect character of the document from which he compiled his observations, I do not think it necessary to do so. I must adhere, then, to the view I took of his observations, collected from the extracts to which I refer—

1st. The impression on my mind was, that the Vienna Commission were profoundly ignorant of what had been done in Edinburgh and London some twenty years ago, on the subject of puerperal fever; and it seemed to me a matter for regret, that Dr. Routh did not explain to the Commission and to the Hospital Physicians of Vienna, (in the event of the Doctor being aware of the researches and inquiries I allude to,) that the inquiry had been already exhausted in the line they were proceeding in; that they were following a course unprofitable for science, and lowering the character of the school. I repeat, it is to be regretted that Dr. Routh did not point this out to the Viennese.

2nd. Dr. Routh complains, that I ascribed to him an opinion he does not hold. I may inadvertently have done so, still the whole tenor of the observations made in Vienna leads to the opinion that the disease was caused by the conveyance of infectious, or contagious, or morbific matter, from the dissecting-rooms or *post-mortem* examinations, by means of the hands of the students and other medical men. Now this means infection, or it means nothing; if it takes place through *post-mortem* examinations of those who have died of puerperal fever, it must be called contagious. If not so, what are the new terms Dr. Routh proposes to give?

3rd. But, in fact, the observations are in nowise to be trusted; they were made apparently by persons ignorant of sound medical literature; and several of the conclusions of the Vienna Commission are like the misdoings of their general government—below criticism.

4th. It is to be hoped, for the sake of humanity and decency, that the character of the medical students of Vienna, given them by Dr. Routh, is, not to say more, somewhat exaggerated. I am inclined to leave this matter in the hands of the Vienna medical men, who will, no doubt, reply to Dr. Routh's observations.

Dr. Routh would much benefit society by publishing the names of those hospitals throughout Europe in which practices similar to those he reports of Vienna are said to prevail. They cannot be too soon exposed and suppressed. In what I have said formerly and now, it will not, I hope, be supposed that anything personal is meant to Dr. Routh. That malpractices exist in Vienna can scarcely be doubted, and that the evil effects of a most atrocious government are now telling deeply on the social condition of that unhappy country. Still I question the facts as stated in Dr. Routh's observations, and I am reluctantly compelled to object to the admitting partial views and imperfect inquiries as matters worthy of comment, or even of notice by the profession.

After the extended researches made for more than half a century into the history of puerperal fever, it seems out of place to record such facts and such theories as those offered by the Vienna Commission with their three years' statistics! A greater misdirection of inquiry has not been submitted to the profession for some years, and was sure to terminate, as it has done, in the mistaking for an endemic a most destructive epidemic disease; in the tracing it to a fanciful and absurd origin, and to the establishing of some other outrageous medical theories, more worthy of the days of De Haen than of Prochaska and his followers.—I am, Sir, yours, &c.,

THOMAS LIGHTFOOT, M.D.

Keppel-street, Russell-square,
August 13, 1850.

POISONING BY CHLORIDE OF ZINC.

[To the Editor of the Medical Times.]

SIR,—Allow me to correct the error to which you have referred at page 145 of this volume, in your notice of the trial of Mary Robinson, for the murder of her child by means of Sir William Burnett's disinfecting fluid. The newspaper reporters have, as you say, mentioned *oxide* of zinc, instead of *chloride* as the lethal drug. This error has, I have no doubt, arisen from the circumstance that I did, in my evidence, speak of having extracted the poison from the child's stomach, and estimated it as oxide.

It may not perhaps be out of place to remark that the acquittal of the woman was founded on three circumstances:—

1st. The absence of a sufficient motive for so terrible a crime as the murder of her own child.

2nd. The difficulty of understanding how the poison could have been given to the child from a large bottle without leaving some traces of it about; and,

3rd. That, as it was impossible to say what quantity of Sir William Burnett's fluid is sufficient to kill a child of thirteen months old, it was not unlikely that the infant might have sucked the poison from the feathers of a duck's wing which had been used by the relatives to sprinkle the disinfecting fluid about the room.

I remain, Sir, &c., &c.,

London Hospital. H. LETHEBY.

MENTAL REQUIREMENTS IN THE PRACTICE OF LAW AND PHYSIC.

[To the Editor of the Medical Times.]

SIR,—In that excellent work of Mr. Blakey, "The History of the Philosophy of Mind," he points out that the true value of all occupations, and the respective rank they hold in public estimation, depend on the quantity of mind required for their successful pursuit. He illustrates this statement by comparing the duties of attorneys, barristers, and judges, and the relative positions of labourer, mason, builder, and architect,—all being valued according to the proportion of mind required in their respective stations. This rule, applied to the various divisions of our own profession, might be instructive, and it might also be considered in reference to the different collegiate and other reforms advocated by so many among us, the test of their respective value being the quantity of mind appertaining to each. Perhaps there is an essential difference in the pursuits of law and physic, and not the same reason for degrees of rank, because the relative quantity and quality of mind does not bear the same disproportion in the various denominations of the medical, as of the legal profession. The relative positions of attorneys and barristers are more marked and distinct than those of general practitioners on the one hand, and physicians and surgeons on the other. The duties of the attorney lead him to a knowledge of the working of the various courts of law, the practical details and technicalities of deeds and conveyances; there is more of routine and mechanism, and less mind than is requisite to the barrister, who, in addition to common law statutes, and the decisions of the courts, is expected to possess a mind trained to a knowledge of the extraordinary deviations of human motives and conduct. A good advocate should comprehend the operations of mind in himself and other men, so that he can discern the various disguises which conceal the real motives engendered by the propensities, affections, and passions of men.

The rule I purpose to apply is clearly seen by comparing the occupations of law and physic. The highest positions in the law require more mind than the highest positions in physic. The barrister requires more intellect than the physician: the attorney less than the general practitioner. There is much more difference in the positions of attorney and barrister than in those of general practitioners and physicians. All medical practitioners require much scientific knowledge; and, whatever the line they pursue, the difference which exists among them depends on degrees of the same kind of knowledge; this knowledge elicits more mind than the dry details of an attorney's office, but certainly less than the varied information and power of reasoning required in a barrister. To be eminent, an advocate must add to scientific knowledge—of which he requires almost as much as a medical man—language, the origin of laws, and the history of mankind at all stages of civilization. Now, the effect of such studies is to give a greater range of exercise to the higher faculties of the understanding, and consequently to elicit more mind than any medical pursuits, or indeed any

other occupation; for in all ages advocates and judges have very properly taken the highest rank in intellect.

I think a candid inquiry will show, that the qualities of mind required by medical practitioners differ in degree and not in kind. We may in this way test the various divisions among us, and estimate their value by the amount of mind required, and on the same principle criticise the different reforms advocated.

The first question which arises is, Do the distinctive duties of apothecary, surgeon, and physician, differ as much as the relative classes in the law of attorney, barrister, and judge? and do they require, as is obviously the case with the latter, different and higher qualities of mind? In former days, when the apothecary was a mere dispenser and administrator of physic and glysters, and the surgeon the dresser of wounds, the performer of venesection, and other operations, under the direction of the physician, there was clearly a defined subordination of ranks. The education of the attorney and barrister are essentially different; not so the different classes of medical practitioners. A barrister need not be at all acquainted with some of the practice of the attorney; but woe to that physician who is incapable, on an emergency, of applying himself to the details of surgery and pharmacy. The essential differences of the various classes among us consist almost wholly in the difference of rank and wealth of those sections of the public among whom they practise; and it is pretty clear that the amount of mind required to diagnose the diseases of the poor and the rich does not much differ. I am perfectly willing to admit, that there are a few physicians and surgeons who limit themselves to consulting practice, who, by the force of mind, have reached the eminence they deservedly possess; for an elevated degree of intellect will always assert its right and take its position, by a law which operates on all mankind. Do the duties of medical practitioners, whatever may be the name by which they are designated, differ in any essential manner? Physicians, surgeons, surgeon-accoucheurs, general practitioners, capture all fish that come to the net; they never inquire to what department the disease belongs on which they may be consulted, but proceed to treat it in the best way their judgment dictates. In some of the offsets of surgery and physic, as the herbalist, the vender of drugs, the chiropodist, the cupper, the dentist, the respective ranks to which the public refer them depend on the quantity of mind required for their respective pursuits. But the accoucheur, the general practitioner, the surgeon, and the physician, cannot be so classed. The accoucheur is often called upon to exercise as much force of mind as the operating surgeon, and the general practitioner often exhibits as high qualities of mind, and requires to be as capable of mental analysis, as the physician. They all require the powers of close observation and investigation, combined with large experience and sagacity. Their duties differ in degree, and not in kind.

The operating surgeon and the *bonâ fide* consulting physician require mental qualities which always command the respect of mankind, and place their possessors in a very high rank of intellect. The first-rate surgeon should possess force of mind, rapid decision, and perfect self-possession, qualities which distinguish great generals and great statesmen: perhaps a perfect surgeon would have been equally distinguished in either of these positions. A consulting physician should, in addition to the greatest professional acquirements, possess extensive knowledge of mankind, stores of erudition; with the highest intellectual and moral faculties, he should have well-trained powers of perception, abstraction, causation, reflection, surmounted by conscientiousness. Mental superiority never did, and never will, fail of finding its level; and I am happy in bearing testimony to the possession of such characteristics in many of the leading physicians of the present day. Still I think it must be granted, that even the highest amongst us require qualities differing rather in degree than in kind; and we all know old general practitioners, and especially country ones, whose sagacity and moral excellence have deservedly placed them in a position equal to that of a leading physician of the capital. What operating surgeon is ever called upon for more firmness, decision, and self-possession than many of our country brethren in a bad case of midwifery, remote from the possibility of all aid, sympathy, or assistance.

From the above considerations, we conclude that the quantity and quality of intellect necessary for the practice of medicine is much the same in all classes of practitioners, and, therefore, the education of all should be the same; all should show themselves competent by the same course of study, and a very efficient and the same examination should be the test applied to all. It is a singular fact, that the majority of students neglect that branch which afterwards forms the staple of their practice—medicine—and apply themselves to surgery, which constitutes but the minor part of any practice. The section of medical men who could obtain sufficient employment in the mere handicraft part of surgery is so small, that our large metropolis could not support a dozen men exclusively as surgeons, the principal practice of the most pure surgery being physic. All should therefore be physicians, or competent to act as such, whatever designation they assume. It would not be difficult to prove that a greater delusion than the College of Surgeons never existed. The effect of its existence has been to send into practice myriads of unfit men; being the only college to which the general practitioner could attach himself, and the only body formerly recognised by the army and navy, all who had any spark of ambition necessarily attached themselves to it. The consequence has been to delude most young men with the notion, that if they acquired a knowledge of surgery the principal object of their studies was gained, and to this day the delusion continues; for the great stream of students at the hospitals are still to be seen following the surgeon instead of the physician. I have no wish to depreciate surgery, but, tried by the test of mind, it is quite clear that the province of the physician is incomparably the highest; and it is most lamentable that this delusion, on the part of the students, should still exist. Men either remain ignorant practitioners, or learn their business after they become members; for, as soon as they commence to see patients, they find that for one case of surgery they have 100 requiring a knowledge of the practice of medicine. We may, therefore, justly conclude that the great attention we have paid to surgery is a gross mistake, and that the College of Surgeons is one of the greatest delusions that ever existed. All practitioners should be competent physicians, whether they practise surgery or not; but the College of Physicians has always been so exclusive, that in former days, when it might have ruled medical education, it neglected its duties, and it is now too late to remedy a grievous evil.

No man, in these days, will be contented with a license to practise from any corporate body, when mind tells him he ought to be a participator in the corporation. By the rule of mind, therefore, only one remedy remains for the great mass of the practitioners of medicine in this country. The College of Physicians repudiate them; the College of Surgeons, as far as they are concerned, is a gross delusion; they must have a new college. The great mistake made by the advocates of this opinion is, that they do not go far enough; they should contend for an independent college of medicine, totally unconnected with either of the existing bodies, with full power to enforce proper education, and to grant perfect privileges. Such a college would not long be subordinate; on the contrary, it would soon take the lead as being the only one founded on the principle of mind. Intellect always did, and always will, govern; and if the advocates of a new college would boldly assert their rights, and intellectually maintain them, they must succeed in doing what common-sense as well as reason dictates to be the only remedy for the present inefficiency in the government of our medical colleges. Proper agitation, governed by mind, must ultimately succeed in obtaining a new college, but not the miserable thing which the College of Surgeons is willing to permit,—a wretched subordinate both in name and in power. The College of Surgeons is deluded itself, as well as being a delusion to others. The College of Physicians effects all that it purposes; it is an aristocratic body, which fulfils its object of supplying intelligent and competent medical advisers to the aristocracy of the country.

If we consider the question of medical reform on the principle of mind, and employ our intellectual and moral faculties in the advocacy of a new medical corporation, we must succeed in establishing an independent college, with full powers. It will be better to wait a few years than accept a miserable substitute. We should appeal to the public, speak to the intellect, employ ourselves in making the country understand that it is the general interest, even more than the medical interest, that is concerned; and, as mind is really the power that governs, and the reform desired is founded on mind—calm, deliberate agitation, carried on with perseverance and governed by reason, must prevail, and many years will not elapse before we shall have

a college of medicine which shall be national, and neither exclusive nor delusive, as the only existing colleges now are.—I am, &c., LIONEL J. BEALE.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

DR. ADDISON, President, in the Chair.

TWO CASES OF IDIOTS,

WITH ABSENCE OF THE THYROID BODY, AND SYMMETRICAL SWELLINGS OF FAT TISSUE AT THE SIDES OF THE NECK.

By T. B. CURLING, Esq., F.R.S., Surgeon to the London Hospital.

Case 1.—In July, 1849, Dr. Little invited the author to see a case of cretinism, at the Idiot Asylum at Highgate, and to examine some swellings at the sides of the neck, the nature of which was doubtful, but which had been suspected to be enlargements either of the lobes of the thyroid body or of lymphatic glands. The inmate was a female child, 10 years of age. She measured two feet six inches in height. The head was heavy-looking, the forehead flat, and the fontanelles unclosed. The countenance had a marked and very unpleasant idiotic expression. The mouth was large, and the tongue thick and protuberant. At the outer sides of the neck, external to the sterno-cleido mastoidei muscles, there were two tolerably symmetrical swellings, which had a soft, doughy, inelastic feel. Similar swellings, but smaller and less defined, were observed in front of the axilla. No enlargement existed in front of the neck. The girl had no power of speech, but was able to recognise her parents. She had a severe attack of erysipelas, which was followed by a considerable abscess in the thigh. A second attack, accompanied by glossitis and stomatitis, caused her death, fifteen months after her admission into the asylum. On examination of the body by Mr. Callaway, the swellings in the neck were found to be composed of fat, and to occupy the posterior triangle of either side of the neck, dipping downwards behind the clavicles, and filling the axillæ. They were not enveloped in capsule, but consisted of fat, of a loose lobular structure.

Case 2.—In November, 1849, a female infant, aged six months, was sent to Mr. Curling for examination, on account of some anomalous swellings in the neck. She had a marked idiotic expression,—a large face, with a small head, and very receding forehead; the tongue was large and protuberant. On the sides of the neck, lying obliquely across, there were two soft soft symmetrical swellings, of an oval shape. The author was struck with the strong resemblance which this case presented, both in respect to the tumours and the general aspect, to the idiot at Highgate. The infant died convulsed, December 7. On dissection, nothing abnormal was observed in the brain, except a remarkably small development of the anterior lobes of the cerebrum. A very careful examination was made of the neck; but no thyroid nor trace of this gland could be discovered. The swellings in the neck were found to consist of fat tissue, without any investing envelope, loosely connected with the surrounding parts.

The author remarks that he is not acquainted with any case on record in which a deficiency of the thyroid gland has been observed in the human body. He considers it highly probable, that the abnormal deposits of fat in the neck were dependent on the absence of those changes which result from the action of the thyroid, or on some imperfection in the assimilating processes consequent on the want of this gland. In conclusion, the author states, that in the foregoing cases we have examples of a defective brain, or cretinism, combined with an entire absence of the thyroid, which may be regarded as tending to confirm the more modern opinion, that the coincidence of these two affections is accidental, or that they have no direct relation.

MEDICAL NEWS.

MILITARY APPOINTMENTS.—13th Light Dragoons — Surgeon Joshua Paynter, from the 48th foot, to be surgeon, vice Young, who exchanges.—24th—Assistant-Surgeon John A. W. Thompson, M.D., from the 85th, to be Assistant-Surgeon, vice Grant, appointed to the 80th Foot.—48th Foot—Surgeon James Young, M.D., from the 13th Light Dragoons, to be Surgeon, vice Paynter, who exchanges.—66th Foot—Acting Assistant-Surgeon Gavin Ainslie Turnbull, to be Assistant-Surgeon, vice La Presle, appointed to the 84th Foot.—80th Foot—Asssistant-Surgeon James Grant, from the 24th Foot, to be Assistant-Surgeon, vice Bain, appointed to the 85th Foot.—84th Foot—Assistant-Surgeon Joseph Thomas La Presle, from the 66th Foot, to be Assistant-Surgeon, vice English, deceased.—85th Foot—Assistant-Surgeon David Stuart Erskine Bain, from the 80th Foot, to be Assistant-Surgeon, vice Thompson, appointed to the 24th Foot.

NAVAL APPOINTMENTS.—Surgeon Archibald J. Little (1845) to the Phœnix steam-sloop on the west coast of Africa.

OBITUARY.—On the 15th inst., in Portland-square, Bristol, Dr. Wm. Ogilvie Porter, aged 76. On the 16th inst., in Cambridge-street, Hyde-park, C. C. Hamilton Grant, Esq., surgeon, Royal Newfoundland Company. On the 19th inst., at 90, Oxford-terrace, Hyde-park, Robert Clarke Edwards, M.D., aged 37.

MR. MACAULAY, the Lecturer on Medical Jurisprudence at St. George's Hospital, has been appointed Assistant-Secretary to the General Board of Health.

DOWNING-STREET, AUGUST 16.—The Queen has been graciously pleased to make and ordain a Special Statute of the Most Honourable Order of the Bath, for the purpose of authorizing the admission into the Military Divisions of the second and third classes of the said Most Honourable Order of such Officers of the Medical Departments of the Army and Navy, and of the East India Company's Armies and Navy, as by their meritorious services have already or may hereafter be deemed by Her Majesty to have deserved such distinction. Her Majesty has accordingly been pleased to give orders for appointing Sir James M'Grigor, Bart., Doctor of Medicine, Director-General of the Medical Department of the Army; Sir William Burnett, Knight, Doctor of Medicine, Director-General of the Medical Department of the Navy; and James Thomson, Esq., Inspector-General of Hospitals on the Bengal Establishment of the East India Company's Service, to be Ordinary Members of the Military Division of the Second Class, or Knights Commanders of the said Order. And Her Majesty has further been pleased to give orders for appointing the following Officers to be Ordinary Members of the Military Division of the Third Class, or Companions of the said Most Honourable Order, namely:—Duncan M'Arthur, Esq., Doctor of Medicine, retired Physician of the Fleet; Sir John Webb, Knight, Director-General of the Medical Department of the Ordnance; Sir James Robert Grant, Knight, Doctor of Medicine, Inspector-General of Hospitals; John Gunning, Esq., Inspector-General of Hospitals; John Robert Hume, Esq., Doctor of Medicine, Inspector-General of Hospitals; Sir John Richardson, Knight, Doctor of Medicine, Inspector of Hospitals and Fleets; Benjamin Fonseca Outram, Esq., Doctor of Medicine, retired Inspector of Hospitals and Fleets; Robert Perkins Hillyar, Esq., retired Inspector of Hospitals and Fleets; Sir George Magrath, Knight, Doctor of Medicine, retired Inspector of Hospitals and Fleets; Sir John Liddell, Knight, Doctor of Medicine, Inspector of Hospitals and Fleets; Henry Franklin, Esq, Inspector-General of Hospitals; James French, Esq., Doctor of Medicine, Inspector-General of Hospitals; Stephen Woolriche, Esq., Inspector-General of Hospitals; Charles Renny, Esq., Superintending Surgeon on the Bengal Establishment of the East India Company's Service; B. W. Macleod, Esq., Doctor of Medicine, Superintending Surgeon on the Bengal Establishment of the East India Company's Service; John Wylie, Esq., Doctor of Medicine, Inspector-General of Hospitals on the Madras Establishment of the East India Company's Service; and Charles Doyle Straker, Esq., Doctor of Medicine, Superintending Surgeon on the Bombay Establishment of the East India Company's Service. [The *Gazette* also intimates that Her Majesty has granted the same privileges to officers of the Commissariat department, upon five of whom the dignity is conferred.] In addition to the above distinction of the Order of the Bath which have been awarded to members of the profession, Her Majesty the Queen has been graciously pleased to bestow, by letters patent, the honour of knighthood upon Dr. B. F. Outram, C.B., F.R.S., F.G.S., &c., &c. Sir Benjamin Outram is the senior retired inspector of fleets and hospitals, and a very distinguished naval medical officer. He was in active service during the most glorious period of our naval history.

HEALTH OF LONDON DURING THE WEEK.

The mortality is decreasing in London. The 874 deaths last week were less by 123 than the deaths in the previous week, and to nearly the same extent less than the average of the 10 corresponding weeks 1840-49 if we exclude the week of 1849, when 2230 deaths were registered. In the same season last year the danger of dying in London was twice as great as it is now; and the epidemics of cholera, and its inseparable attendant diarrhœa, which destroyed 1230 and 188, were fatal last week only to 8 and to 139 lives. Six of those who died of cholera were children, one was a dirty labourer of the age of 41, who lay about in stables; and one was a widow of the age of 73 who refused to take nutritious diet. Of the 139 persons who died of diarrhœa, 118 were children under 15 years of age, 8 were adults, and 13 were aged persons.

Looking at the numbers, as well as the details of the cases of cholera returned, and at the advaneed period of the year —so many weeks after the epidemie broke out, not only in 1832 and 1849, but in 1833—it must be admitted that the chanee of an outbreak in the present year is considerably diminished. The immunity from attack will no doubt aeeelerate the great works whieh are now in eontemplation for the drainage and purification of London; for it cannot be forgotten that that unseen power of the air which slew so many thousands last year may return, and put the sanitary defenees of the eity to a second and severer proof, when the population is more scantily supplied with vegetables, fruit, bread, meat, and other means of living.

MORTALITY TABLE.

Deaths in the week ending Saturday, Aug. 17, 1850.

(Metropolis.)

Causes of Death.	Aug. 17. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	441	261	172	874	10525
Specified Causes	439	261	171	871	10458
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	208	29	19	256	3836
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	3	31	19	53	484
Tubercular Diseases	62	92	12	166	1738
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	48	27	31	106	1131
Diseases of the Heart and Blood-vessels	2	11	9	22	251
Diseases of the Lungs, and of the other Organs of Respiration	27	23	20	69	742
Diseases of the Stomach, Liver, and other Organs of Digestion	17	25	9	51	812
Diseases of the Kidneys, &c.	...	8	4	12	83
Childbirth, Diseases of the Uterus, &c.	...	8	...	8	80
Rheumatism, Diseases of the Bones, Joints, &c.	3	1	3	7	50
Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	11
Malformations	3	...	...	3	18
Premature Birth and Debility	34	2	...	36	217
Atrophy	21	1	1	23	214
Age	...	...	40	40	467
Sudden	...	...	...	...	76
Violence, Privation, Cold, and Intemperance	19	4	4	18	248
Causes not Specified	2	...	1	3	67

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	Aug. 17, 1850.	Sum of Ten Weeks.
London...	1948369	874	10525
West	301189	129	1524
North	376568	179	1837
Central...	374199	154	1784
East	393067	181	2510
South	503346	231	2870

The following is the number of Deaths occurring from some of the more important special causes :—

Apoplexy	19	Heart	18	Phthisis.....	114
Bronchitis	25	Hooping-cough ...	13	Pneumonia	28
Cholera	8	Hydrocephalus ...	26	Scarlatina	24
Childbirth	6	Influenza	...	Small-pox	10
Convulsions	42	Liver	9	Stomach	1
Diarrhœa	139	Lungs	5	Teething	8
Dropsy	17	Measles	11	Typhus	27
Erysipelas	5	Paralysis	18	Uterus	1

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	689	441	248
Females	674	435	241
Total.....	1363	874	489

METEOROLOGY OF THE WEEK.

Day.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Ditto. Dew Point.	Mean of Thermometer. Dry.	Mean of Barometer.	General Direction of Wind. A.M.	P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	+ 0·9	51·3	62·0	29·634	A.M. W.	P.M. S.W.	Miles. 180	0·00	Nothing was shown at any examination.
Monday	− 3·2	55·0	57·9	29·625	Calm.	Calm.	55	0·80	Positive, and very active during the afternoon; sparks and galvanic currents were shown.
Tuesday.....	+ 1·7	57·6	62·9	29·717	Calm.	Calm.	50	0·00	Positive, and tension weak at 9 p.m.
edn esday.	+ 0·3	57·5	61·6	29·866	N.E.	N.	95	0·00	Positive, and tension strong at 9 p.m.
Thursday ...	− 1·0	58·2	60·5	29·837	N.N.E.	N.	180	0·06	Positive, and tension variable during the morning.
Friday	+ 4·9	58·6	66·6	29·812	N.	N.	60	0·00	Nothing was shown throughout the day.
Saturday ...	+ 4·7	61·1	66·5	29·834	Calm.	N.	50	0·86	Nothing was shown throughout the day.
Means ...	+ 1·2	57·0	62·6	29·761	N.		SUM 670	SUM 0·16	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications have been received from Dr. John Davy, F.R.S., of Ambleside, "Report of Cholera as it occuired in Ceylon in 1819;" Dr. Barclay, Medical Registrar at St. George's Hospital, of Curzon-street, May-fair, "Case of Acute Rheumatism, with Suppuration and Delirium Tiemens;" Limericensis, on "Cod-liver Oil;" X. Y. Z.; Dr. Letheby, of the London Hospital, on "Poisoning by Chloride of Zinc;" Dr. Sheridan Muspratt, of the Liverpool College of Chemistry; Secretaries of Metropolitan Sanitary Association; Dr. Ayres, of Portland-place, Wandsworth-road; Dr. Snow Beck, of Langham-place, "Papers on Uterine Pathology as related to Uterine Physiology;" Mr. Nunn, Demonstrator of Anatomy at the Middlesex Hospital, "Observations on Varicose Veins and Varicose Ulcers;" Mr. Holmes Coote, Demonstrator of Anatomy at St. Bartholomew's Hospital, "On Abscess" (Surgical Report); Mr. Newnham, of Farnham, "Report of the Medical Benevolent Fund for the year 1849-50;" One who Looks to some Evidence to support the Propositions, of Scientific Pretensions, "On Dr. Davey's appointment to Colney Hatch;" Detector, "On the Halifax Case;" Mr. H. Wilkins; Mr. Braid, of Manchester; Mr. Davies, of Galway; Dr. Barker, of Dumfries, Physician to the Royal Infirmary, "Remarks on Premature Birth, with a Case in which a Child born in the beginning of the six month was reared;" Mr. Hunt, of Bedford-square, "On the Medicinal Action of Arsenic in Cutaneous and other Diseases," No. 2; Mr. Ward, of Finsbury-place, "On Dislocation of the Femur into the Obturator Foramen," (report from the London Hospital.)

The following Books have been received :—

The Races of Men, and their Geographical Distribution. By Charles Pickering, M.D. New Edition. To which is prefixed an Analytical Synopsis of the Natural History of Man. By John Charles Hall, M.D., of Sheffield. Pp. lxxii. and 445. London: H. C. Bohn. 1850.

Treatise on Diseases of the Larynx and Trachea, embracing the different forms of Laryngitis, Hay Fever, and Laryngismus Stridulus. By John Hastings, M.D., Licentiate of the Royal College of Physicians, Physician to the Dispensary for Consumption and Diseases of the Chest. Pp. 160. London: Longmans. 1850.

Short Notes in Reply to Dr. Davey's Work, entitled, "Contributions to Mental Pathology," with a brief notice of Dr. Davey's official career in Ceylon, carefully collated from official documents and information. By J. M. Grant, M.D., M.R.C.S.E., Assistant-Surgeon to Her Majesty's Forces. Pp. 108. Colombo. 1850.

Insanity Tested by Science, and shown to be a Disease rarely connected with permanent Organic Lesion of the Brain, and, on that account, fa more susceptible of Cure than has hitherto been supposed. By C. M. Burnett, M.D. Pp. 107. London: Highley. 1848.

Observations on Trance; or, Human Hybernation. By James Braid, M.R.C.S., Edinburgh. Pp. 72. London: Churchill; Edinburgh: Black. 1850.

The Scalpel; a Journal of Health, adapted to Popular and Professional Reading, and the Exposure of Quackery. Edited by C. H. Dixon, M.D. August, 1850. New York.

Mr. H. Wilkins writes:—"Can an apothecary, having only the certificate for practising as such within ten miles of London and the provinces, obtain his accounts for attending a patient in London? A case of this kind came on for hearing in the Sheriffs' Court yesterday, when the judge decided he could not. As many of your readers are not perhaps aware of this fact, you will oblige yours, &c., by inserting this in your next."

Dr. Davy's valuable communication shall receive early insertion. A proof will be forwarded as requested.

Mr. Ure's account of a tumour removed from the neck will be published as soon as the illustrative engraving is completed.

We shall take an early opportunity of reviewing Mr. Grantham's "Facts and Observations."

Mr. George King, of Bath, informs us that Mr. Bartrum's "Cases of Craniotomy" were not read at any meeting of the Bath and Bristol branch of the Provincial Association.

[To the Editor of the Medical Times.]

SIR,—You will oblige me much by informing me what complement of oil on an average does the liver of a cod produce, also its chemical properties.

Indeed, Sir, it is really ludicrous to see the majority of our practitioners here ordering it in almost every case and stage of disease. I actually saw it administered by an M.D., who holds a high head, to a patient labouring under uterine pains after delivery. In fact, in the way they are using cod-liver oil here, both high and low, it would, in my opinion, take all the cods in the sea to supply them for six months.

Our cod advocates speak and vaunt much of its efficacy in all cases. And so does Holloway the quack, in vindication of his mysterious pill cures, which I verily believe to run nearly allied to our cod practitioners.

Yorkshire. LIMERICENSIS.

*** We are not aware of any estimate of how much oil one liver will yield. Dr. de Jongh, of the Hague, says,—"A ton of oil, of 240 litres, requires, according to circumstances, the livers of from 40 to 80 cwt. of fish, weighed in a dry state."—See Dr. Carey's Edition.

There are three kinds of oil, the pale, the light brown, and the brown, and these on analysis yield, in different proportions, iodide of copper, iodine, bromide of calcium, and bromine. Cod-liver oil is a very valuable remedy, but, like all other hobbies, in some hands it is pushed to an absurd extent.

Our Galway correspondent's wishes shall be complied with as soon as possible. We will suggest the matter to our Irish Correspondent.

Dr. Davey's Appointment to Colney Hatch.—A correspondent upon this appointment, who fully concurs in the condemnation which we give to phrenology and mesmerism—"those two systems of enormous humbug,"—need not be alarmed. Assuredly, "the visiting justices, who profess to do all the work of the Middlesex Asylums, will look to it that Dr. Davey does not play any phreno-mesmeric pranks under their eyes." Nor is it likely that "the rate-payers of the county of Middlesex will allow their magistrates to lay out their funds in schools for any such jugglery and foolery." As regards Dr. Davey's reception at Ceylon, our correspondent will observe that Dr. Grant has published "A Brief Notice of Dr. Davey's Official Career in Ceylon."

Detector.—The communication of this correspondent reveals a most disgusting state of affairs in Halifax. Should occasion require, we will avail ourselves of the information.

We can only repeat that we have received a further supply of copy from Mr. Wardrop, and hope that he will enable us to complete the work, as promised, by the end of the month. 40 additional pages are already printed.

NEWSON'S PATENT WIRE TRUSS.—A truss is an instrument which is not only to be applied for a short time, but is to be constantly worn, the main object in its construction, therefore, should be simplicity and lightness, and such an amount of flexibility, that it may readily adapt itself to the various movements of the body without being displaced, and at the same time prove as little an incumbrance as possible to the wearer. The one under notice is very simple. It consists of a round wire spring, and has no fastenings or straps whatever, and its adjustment differs in this way from others, that, when used, it "passes from the hernia obliquely across the abdomen round the opposite hip." We have examined this truss, and have inspected a patient who wears it for a double hernia, and it appears to be borne with the greatest ease and efficacy.

BRITISH MEDICAL FUND.

DIRECTORS.

JOHN FORBES, M.D., F.R.S., Chairman.

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The Society being now constituted by Act of Parliament, and the Rules and Regulations sanctioned by the Members, is in a condition to receive proposals for Annuities, Allowance in Sickness, and Life Assurance, for sums not exceeding £200.

As by the Rules there must be 250 Subscribers previously to granting Reversionary Annuities, and 200 previously to granting Allowances during Sickness, it is requested that Gentlemen intending to avail themselves of either of these provisions will forward their names to the Secretary without delay. Deferred Annuities and Life Assurances can be granted at once, there being no limitation with regard to them as to the number of the Subscribers.

A Prospectus, containing an outline of the Society, will be forwarded to any Member of the Medical Profession on enclosing a postage stamp; and Books of the Rules, with complete sets of Tables (price 1s.), may also be had on application to the Secretary, at the Society's Offices, 28, Bloomsbury-square.

By order of the Board.

GEORGE HAWTAYNE, Secretary.

28, Bloomsbury-square, August 21, 1850.

KING'S COLLEGE, LONDON.

MEDICAL DEPARTMENT.

The Winter Session, 1850-51, will COMMENCE on TUESDAY, October 1, 1850, on which day all Students are expected to attend the INTRODUCTORY LECTURE, by Professor Edward Forbes, F.R.S, at Two o'clock.

The following Courses of Lectures will be given during the Session:—

ANATOMY, Descriptive and Surgical—Professor Richard Partridge, F.R.S.; Demonstrators, W. Brinton, M.B., and Henry Lee, F.R.C.S.; Assistant Demonstrators, Henry Hyde Salter, and John Wood.

PHYSIOLOGY and GENERAL MORBID ANATOMY.—Professors, R. B. Todd, M.D., F.R.S., and W. Bowman, F.R.S.

CHEMISTRY, Theoretical and Practical—Professor W. A. Miller, M.D., F.R.S.; Demonstrator, J. E. Bowman.

PRINCIPLES and PRACTICE of MEDICINE—Professor George Budd, M.D., F.R.S.

PRINCIPLES and PRACTICE of SURGERY—Professor William Fergusson, F.R.S.E.

KING'S COLLEGE HOSPITAL.

The Hospital is visited daily.

Clinical Lectures are given every week, both by the Physicians and by the Surgeons.

The Physicians' Assistants and Clinical Clerks, the House Surgeons and Dressers, are selected by examination from the Students of the Hospital.

One Scholarship of £40, tenable for three years; one of £30, and three of £20 each, tenable for two years, will be filled up in April next.

Full particulars upon every subject may be obtained from Professor Guy, M.D., Dean of the Department; or upon application to J. W. Cunningham, Esq., Secretary.

July 30, 1850. R. W. JELF, D.D., Principal.

ST. THOMAS'S MEDICAL SESSION.

The Introductory Address will be delivered by Dr. GREGORY, on TUESDAY, 1st OCTOBER, 1850, at Eight o'Clock P.M.

Gentlemen have the option of paying £40 for the first year, a similar sum for the second, and £10 for each succeeding year; or of making special entries to Lectures, or to Hospital Practice.

SCHOLARSHIPS AND PRIZES FOR 1850-51.

A SCHOLARSHIP of £20, for the best voluntary Classical and Mathematical Examination, at the commencement of the Student's Hospital attendance.

TWO SCHOLARSHIPS, for first year's men, each of the value of £20 a-year, and tenable for three years.

The two House Surgeons, the twelve Dressers, and the Resident Accoucheur, will be selected according to merit; and provided with Rooms and Commons in the Hospital, free of expense.

THE PRESIDENT'S PRIZES. The first, 10 Gs. The second, 5 Gs.

TWO PRIZES for CLINICAL MEDICINE, and PRIZES and CERTIFICATES of HONOUR, in each of the different Classes.

Mr. NEWMAN SMITH'S PRIZE, £5. Mr. GEORGE VAUGHAN'S PRIZE, the CHESELDEN MEDAL.

Dr. ROOT'S PRIZES. 10 Gs. ONE of the GOVERNORS, a PRIZE of 5 Gs.

THE TREASURER'S PRIZES. The first, a Gold Medal. The second 5 Gs.

The TREASURER'S PRIZE, to be awarded in 1851. One Hundred Pounds for the best Essay, including Original Researches on Organic Chemistry, in its relation to Pathology and Practical Medicine. The special subject of the Essay is, "On the Chemical and Physiological action of Mercurial Preparations."

MEDICAL OFFICERS AND LECTURERS.

Dr. Roots, Consulting Physician; Dr. Barker, Dr. Leeson, Dr. Risdon Bennett, Mr. Green, Mr. South, Mr. Mackmurdo, Dr. Goolden, Dr. Cohen, Dr. Peacock, Mr. Solly, Mr. Le Gros Clark, Mr. Dixon, Dr. Waller, Mr. Simon, Dr. Gregory, Dr. E. Meryon, Mr. Grainger, Mr. Saunders, Mr. Rainey, Mr. G. Luxford, Mr. Adams, and Mr. Bristowe.

COLLEGIATE ESTABLISHMENT.

Under the direction of the Treasurer and Almoners of the Hospital, houses have been fitted up as residences for the Students, and a College Hall, where Commons will be provided.

To enter, or to obtain further information, apply to G. Mackmurdo, F.R.S., Dean of the Medical School; or to Mr. Whitfield, Resident Medical Officer, at St. Thomas's Hospital.

ORIGINAL LECTURES.

LECTURES
ON
BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE V.

Tuberculosis a Disease of the Blood.—Its Diagnostic Signs and Symptoms.—Of the Anæmia of Tuberculosis.—Of the Emaciation.—The Progress and Results of the Emaciation of Tuberculosis.—Its importance in Diagnosis.—Necessity for the Use of the Weighing-machine.—Dr. Hutchinson's Experimental Researches.—His Table as a Standard of Comparison.—Of Direct Debility as a Symptom of Tuberculosis; in the Voluntary Muscular System; in the Involuntary Muscular System.—The Pulse.—The Respiration.—Diminished Vital Capacity of the Lungs.—Methods of Estimating the Breathing Power.—Dr. Sibson's Chest Measurer.—His Experimental Researches.—The Mobility of the Chest.—Experiments of MM. Beau and Maissaiat, and M. Bourgery, referred to.—Diminished Vital Capacity a Diagnostic Sign of Tuberculosis before the Accession of Local Disease.

ON THE SIGNS AND SYMPTOMS OF TUBERCULOSIS.

The prominent characteristics of tuberculosis, when it presents itself as a disease, are, like those of the predisposition, both structural and functional. When the disease is progressive, or so long as it is slight, the signs and symptoms may consist only of an assemblage or grouping of a certain number of those deviations from the healthy structure of parts, and of those aberrations of function, which have been so fully described in former lectures as symptomatic of the tuberculous predisposition. When tuberculosis is an original disease, or if it be superinduced in a habit originally predisposed, but which, for a longer or shorter period, has been replaced by healthy hæmatosis and perfect nutrition, its immediate effects may be observed independently of many of the characteristics of its slighter shades, and of its more continued operation. Under any circumstances tuberculosis has its appropriate diagnostic signs and symptoms. They are for the most part present from the earliest commencement of the disease, and, in fatal cases, they generally continue in a state of aggravation or progression, till its termination. Hitherto the practitioner has been accustomed, in all cases of tuberculosis, to look for the signs of local disease as the earliest indications of the existence of a disease, regarding the presence of these as essential for the affirmation of the presence of the general disease; and, after the detection of local disease, all the symptoms have been too exclusively referred to this as a cause. Hence, from first to last, the signs and symptoms of the local disease have been strangely commingled with those of the general disease; as, on a future occasion, we shall find the causes have also been. The existence of tuberculosis as a general disease has thus been overlooked or denied. In these lectures I think I shall show that, in many cases, it is the disease of the blood which destroys the patient, and that sometimes the local disease has comparatively little to do with the fatal event. In all cases, it is a malady of the blood, characterised by its appropriate signs and symptoms, to which the local disease must be referred for the explanation of its specialty and its fatality; and the general disease of the blood may be recognised by its signs and symptoms, throughout the course of every variety of tuberculous affection.

Viewed as a disease of the blood, independent of any local affection of the lungs, or other organs or structures, tuberculosis may present itself in individuals of the constitution already described, in those predisposed by various debilitating causes, or in the previously robust and healthy. On the one hand, the predisposition may pass imperceptibly, without any obvious existing cause, into a state of disease; or the disease may be superinduced by the continued or renewed operation of its causes in such a constitution; the more essential characters of the tuberculous habit becoming more distinctly marked than heretofore, and the condition of health, or comparative health, superseded by that of real and unequivocal disease. On the other hand, tuberculous blood may be produced in healthy individuals at any period of life, from the operation of the causes of tuberculosis; and, according as these causes are brought into play earlier or later in life, and in proportion to the stage of development of the various parts of the body, the constitutional signs already described, particularly those which mark the irregular development of the different organs, may or may not present themselves. The occurrence of tuberculosis in the predisposed is more common than the acquirement of it by the robust and healthy, but, in the latter, the morbid blood soon produces malnutrition of the same nature as occurs in the former, in those tissues where the change of matter continues active, as in the cellular tissue, skin, and mucous and serous membranes. Under all circumstances, when tuberculosis as a disease sets in, the changes of structure and function already described become more general and more decided.

Before the signs and symptoms of tuberculosis are described in detail we must again refer to the subject:—

OF THE BLOOD IN TUBERCULOSIS.

The deficiency which exists in direct investigations of the state of the blood in individuals enjoying comparative health, but of a tuberculous constitution, has been pointed out. There is the same cause of regret that the blood has not been properly examined in the tuberculous cachexia of authors—or tuberculosis. The analyses detailed in a former lecture are all we have at present to rely upon, and, in a great majority of these, intercurrent or superinduced local affections undoubtedly existed. As, however, the structural and functional changes, already described as constituting the predisposition, indicate, and are explained by, the peculiar character of tuberculous blood, so it will be found that the whole history of the confirmed disease indicates a more aggravated morbid condition of the blood of the same nature. When carefully considered, the symptons leave no doubt whatever, that, apart from local affections and other complications, the deviations from the physiological standard of the blood in the one case, and its decidedly diseased condition in the other, are originally the same, differing only as respects the period and the degree of the affection.

The characters of the blood in tuberculosis will be found in detail in the first lecture, but the proportion of the red corpuscles is still further diminished, and the diminution progressively increases as the disease advances, so that from 147 parts in 1000, they frequently fall in the adult male to 80 parts in extreme cases. The deficiency is not so great in this as in some other less fatal diseases. In chlorosis, for instance, Andral found the cypher of the red corpuscles as low as 30, whereas in one case only of tuberculosis he found it as low as 72; and in his analyses of cases of phthisis, in its various stages, the cyphers oscillated between 80 and 100, so that the diminution of corpuscles is not generally sufficient to be accompanied with the *bruit* in the carotids. With the loss of the corpuscles the whole solids of the blood are diminished, and it becomes more and more aqueous. The analyses before us lead to the inference, that the proportion of the albumen increases in a slight degree, and the analyses and the physiological and pathological products of the liquor sanguinis show not only diminished but vitiated elaboration; the protein base and its compounds, especially the albumen and fibrine, are in all probability vitiated in quality. We have no other knowledge of the state of the salts and oleaginous and extractive principles than has been set forth in the former lectures, but the blood generally gives evidences of that defective vitality which has been laid down as its most general characteristic in this disease. Tuberculosis rarely existing in a marked form or continuing any length of time without some local disease arising from malnutrition, or of an inflammatory or purulent character developing itself, the blood has rarely, if ever, been examined in its simply tuberculous state; and since most of the superinduced local affections occasion an increase of fibrine and a general temporary increase of vitality, the analyses extant most frequently exhibit a higher cypher for the fibrine than they would otherwise do, and sometimes a much higher cypher than the physiological standard; and, from the same cause, the clot, which in uncomplicated tuberculosis is small, weak, and diffluent, in cases as they actually

occur, although small, is found to be tolerably firm and frequently buffy.

When the blood is actually diseased, and tuberculosis unequivocally established, many of the phenomena which characterize the predisposition become true signs and symptoms; but the more important diagnostics are:—

(1.) Anæmia.

(2.) Emaciation.

(3.) Direct debility:—

a. In the voluntary muscular powers;

b. In the involuntary muscular powers;

c. In the respiration and vital capacity of the chest;

d. In the natural functions.

(4.) Diminished power of sustaining the animal temperature.

(5.) Febricula.

ON THE ANÆMIA OF TUBERCULOSIS.

Whether tuberculosis be developed in a constitution originally predisposed, or in the robust and healthy, one of the earliest symptoms is a general anæmic condition, which supervenes on the disease of the blood. If the case be only a transition from a well-marked predisposition to actual disease, this characteristic becomes, with greater or less rapidity, more decided than heretofore; the appearance presented by the skin generally, and the complexion in particular, being more distinctly marked. The cutaneous tissues assume a faded or dingy hue, or a permanent pallidity, the countenance only being subject to transient flushes. This anæmia of tuberculosis depends in part upon a diminution of the whole mass of blood, but in greater part upon a diminished proportion of its red corpuscles. This state of anæmia frequently exists for a long time before tuberculosis is recognised as a disease. The lips and gums, which hitherto may have maintained their roseate tint, gradually assume the anæmic character, and the sclerotic coat of the eye, from a diminution of the red corpuscles circulating over it, acquires a distinct pearly hue; the mucous membranes become pale, and apparently bloodless; the serous membranes partake of the same morbid condition, and the anæmic character is preserved throughout, even in the case of a solution of continuity as in the vicinity of ulcers. But the anæmia of tuberculosis differs from simple anæmia; the blood-vessels are not so empty; there is not necessarily that tendency to syncope on assuming an erect position; nor to palpitation, œdema, or effusion. The anæmic tissues are dingy rather than waxy. Many of the effects of true anæmia sometimes result from the anæmia of tuberculosis, but not necessarily so; and when the subject of causation is before us, we shall find that some of those causes which are undoubtedly adequate to the production of anæmia, even to its fatal extreme, never yet produced a case of tuberculosis. The anæmia of tuberculosis also differs from that of chlorosis in the character of the blood, and its concomitants, and especially in the peculiar hue which the tissues present. The anæmic symptoms, so constantly observed in this disease, mainly depend, as already stated, upon the particular morbid condition of the blood which constitutes tuberculosis; although in part also, undoubtedly, upon a diminution of the whole mass of the blood.

ON THE EMACIATION OF TUBERCULOSIS.

Emaciation is the most general characteristic of the structural changes in tuberculosis. It is sometimes that which both patient and friends are the first to observe as indicative of a modification in the state of the constitution. Frequently, indeed, it occurs with very slight concomitant indications of deranged health, and, as remarked when treating of the predisposition, it may prove of temporary duration, the frame recovering a perceptible, although spurious *embonpoint*, on some salutary change. The character of the emaciation of tuberculosis requires to be well considered by the practitioner. It takes its rise from a morbid condition of the blood, and defective organization of the fundamental areolar tissue, and of all those structures of which this tissue forms the basis. There is a consequent loss of correspondence between the powers of deposition and absorption.

The first inroads of this emaciation are indicated by a diminished density and tension of structure. A soft and consequent yielding condition for the most part accompanies the anæmia already described. This diminished density and tension in the tegumentary membranes render the limbs flabby, a circumstance frequently observed in young children; it occurs rapidly, especially when they have previously exhibited that puffiness and spurious hypertrophy which characterise the predisposition; and it occasions a peculiar shrinking of the features; the delineations of the muscles being more distinctly seen.

Whenever, in a tuberculous subject, or under circumstances calculated to induce tuberculosis, a wasting of the tissues sets in, and becomes either insidiously or rapidly progressive, it is a sign well calculated to excite the most serious alarm.

This emaciation is not quite universal. It is exhibited in the membranous more decidedly than in the parenchymatous structures. The cellular and adipose tissues are affected by it in the first place, and the muscles subsequently; although there is a twofold cause for the emaciation of the muscles, the defective nutrition of the fibrous tissues generally,—a frequent characteristic of the predisposition, which is more decided when actual disease sets in,—and the diminished use of the voluntary muscles resulting from the debility, which will presently be described. The muscular atrophy is, however, less easily, and later observed than the defects of the more superficial structures, which have cellular tissue for their basis. From the experiments of the late Dr. Clendenning, (a) it would appear that the viscera, for the most part, do not participate in this emaciation. It falls upon the organs of locomotion, probably the heart, the cellular and fibrous tunics of the vessels, and the alimentary canal; but the liver, kidneys, spleen, pancreas, and other organs, appear to maintain their density and bulk. The experiments upon which this statement is advanced were, however, made upon individuals who died with local disease; and it may be here stated, that in the midst of the general waste—as tuberculosis with local disease of the lungs especially, advances—a large deposition of fat frequently occurs in the liver and kidneys, and probably in other viscera. We know not what allowance ought to have been made for this deposition, or whether it constituted a part of the bulk in the particular cases examined, so that we cannot at present assume that the viscera are altogether exceptions to the general atrophy of this disease. The abdomen, unless distended by air in the intestines, becomes wrinkled and flat. As tuberculosis is met with in this country, particularly in the early stages, before any local affection developes itself, there is reason to believe that the medullary matter is frequently exempt from the defective nutrition, for the reason already stated; although, in the more inveterate forms, particularly where the disease has been hereditary through several generations, as in the cretins, and probably in some of those infantile cases which assume the cerebral form of the disease, the medullary structure is, in all probability, involved. Even in active tuberculosis, as in the predisposition, this exemption of the structure of the nerves from the general deterioration, frequently secures the healthy performance of the nervous functions for a great length of time—notwithstanding the rapid wasting and, as it were, liquefaction of the body,—the sensorial and intellectual faculties are not only duly performed, but even more acute than natural, and, except from loss of power, which we shall presently have to notice, the sensations and mental operations of the patient deviate but little from those of health, till within a few days, and sometimes within a few minutes, of dissolution.

It has been well remarked, that the atrophy of tuberculosis is not simply a defect of nutrition, in which the number of the molecules which compose the tissues is decreased, the tissue retaining its natural composition and organization, but, corresponding with the special morbid state of the blood, it is an alteration in kind. As in the anæmia already described, it is not produced by a deficiency of the usual supply of blood—a very common cause of atrophy—nor by fever, nor by excessive evacuations, nor by any defect of primary digestion; for in many cases neither of these circumstances have existed. The appetite and digestion will frequently continue good till within a few hours of death; and in cases where emaciation from other causes has proceeded to the most extreme degree, tuberculosis has not been produced; but the emaciation of tuberculosis is attributable to a specific vitiation of the blood producing a corresponding vitiation of the blastema and mal-organisation and mal-nutrition of cells, the vital power of which being below the healthy standard,

(a) "Medico-Chirurgical Transactions," Vol. XXII., p. 33. 1838.

there is a consequent excess of the disintegrating over the integrating processes.

The emaciation of tuberculosis is so important in diagnosis, pathology, and treatment, that the practitioner cannot be too vigilant in its detection, whenever its existence is suspected, either in those who are predisposed to the disease, or in individuals placed under circumstances in which a tuberculous state of the blood is likely to be produced; nor too careful in watching its progress. For these purposes, direct observations on the weight of our patients are absolutely necessary. No vague notions on this point will serve any useful purpose. If we trust to these, on the one hand, the atrophy may proceed to the stage of tuberculous aggregation in some important organ, before we are certain of its existence, and, on the other hand, we can never appreciate the results of treatment. Nor is the determination of the absolute weight of the patient in tuberculosis important only for the purpose of detecting emaciation, and watching its progress, as an absolute sign of the disease, and as a measure of the gross effects produced in the fluids and organic tissues by the vitiated state of the blood. It is also essential for the purpose of assisting in the estimation of the value of other symptoms. We shall find, as we proceed, that the respiratory powers are modified in tuberculosis, and furnish symptoms of the disease; but the weight of the body exercises a direct influence over the respiratory function, and in this point of view it is essential to study the weight of the patient, and to be aware of the import of the absolute and relative weight, and the variations of weight to which the body is liable. To determine this, and for the purpose of detecting the first inroads of tuberculous emaciation, and watching its progress, I have followed Dr. Hutchinson's recommendation, and adopted the use of the French scale, or weighing machine, as a correct instrument, and occupying little space. To this gentleman we are indebted for many valuable experiments on the subject, and in these lectures I propose to avail myself extensively of his results. (a)

There are certain points connected with the weight of the body which it is essential to bear in mind in making observations on the weight of patients labouring under tuberculosis, and, as these are not generally comprised in works on physiology, I introduce them here. As a general rule, the weight of the body increases with the height; but the absolute weight, in relation to the height, varies considerably, being, nevertheless, within the physiological range; thus the weight requires to be estimated in relation to the height, so that, together with the weight, the height of the individual should be taken and noted. As a standard of comparison, Dr. Hutchinson has constructed a table of the mean weight of a large number of males at the middle period of life, in relation to their height. We shall find that tuberculosis diminishes the function of respiration; but excess of weight also diminishes the function of respiration; and, in estimating the respiratory function, as a sign of tuberculosis in corpulent individuals, the latter circumstance must be taken into account. The influence of excess of weight, however, over the respiratory function, is not felt until the excess goes beyond seven per cent. of the mean; so that, to the mean which an individual ought to weigh, seven per cent. must be added, before we allow for the corpulency as influencing the respiration. Dr. Hutchinson's table, which follows, comprises this latter circumstance. I have employed this table with great advantage. It is constructed from observations made on

2650 *Healthy Males at the Middle Period of Life.*

Exact Stature.	Mean Weight.	Weight increased by 7 per cent.
ft. in.	st. lbs. lbs.	st. lbs. lbs.
5 ,, 1	8 ,, 8 or 120	9 ,, 2 or 128
5 ,, 2	9 ,, 0 126	9 ,, 9 135
5 ,, 3	9 ,, 7 133	10 ,, 2 142
5 ,, 4	9 ,, 13 139	10 ,, 9 149
5 ,, 5	10 ,, 2 142	10 ,, 12 152
5 ,, 6	10 ,, 5 145	11 ,, 1 155
5 ,, 7	10 ,, 8 148	11 ,, 4 158
5 ,, 8	11 ,, 1 155	11 ,, 12 166
5 ,, 9	11 ,, 8 162	12 ,, 5 173
5 ,, 10	12 ,, 1 169	12 ,, 13 181
5 ,, 11	12 ,, 6 174	13 ,, 4 186
6 ,, 0	12 ,, 10 178	13 ,, 8 190

(a) "Medico Chirurgical Transactions," Vol. XXIX., p. 137.

The usual or natural weight of an individual may differ from the above standard both in *excess* and *deficiency;* and, at all times, deficiency of weight tends to show deficient nutrition. In tuberculosis, the absolute weight, in reference to the mean standard for the individual, not presenting a very marked difference, is a fact, *per se*, of considerable practical value; but, we shall presently find, that it has a most important bearing upon the subject of the respiration in this disease. In the present place we are only insisting upon the necessity of detecting and watching loss of weight as an important diagnostic sign of tuberculosis.

When in tuberculous subjects, or in subjects placed under circumstances calculated to produce tuberculosis, a wasting of the tissues sets in, and becomes either insidiously or rapidly and obviously progressive, independent of any local symptom or physical sign whatever, it is calculated to excite the most serious alarm. Dr. Hutchinson lays it down, that a *slow* and *gradual* loss of weight is more serious than a *quick* and *irregular* loss of weight, and my own experiments fully confirm this remark. A person may, from time to time, *lose* and *gain* weight; but he cannot do this slowly and gradually without exciting suspicion of the existence of some serious disease. In tuberculosis the loss of weight is at first almost imperceptible, and would with difficulty be detected even by weighing. Omitting to avail ourselves of this process, it may proceed even to a considerable extent without being perceived; but it insidiously and constantly advances; and in an individual predisposed to tuberculosis, if this progressive waste is unattended with any decided organic or functional affection of the viscera, it may, therefore, be more rather than less alarming. It indicates that the blood is becoming so decidedly tuberculous, as to cease to be capable of sustaining the healthy functions of life, and especially the functions of respiration and nutrition.

Such is the importance of loss of weight and the emaciation of tuberculosis. It is quite true that death may occur in certain forms and varieties of the disease long before this emaciation takes place to any great extent; as, for instance, in cases of what is denominated "acute phthisis," "tubercular pericarditis," &c.; but, then, the death is produced by some intercurrent disease, as pneumonia, pleuritis, perforation, or hæmorrhage. I lately examined the body of a female who died of pneumonia, with tubercles in her lungs, and an inch depth of fat over the abdomen; still, she had lost weight before the attack of pneumonia. When tuberculosis pursues its course uninterruptedly, this emaciation is progressive. In those cases in which defects of the bony skeleton have formed part of a predisposition, they become more manifest than heretofore; the projection of the shoulders, for instance, is greatly increased after the muscles become emaciated and the fat absorbed; the contraction of the chest also becomes more obvious. Laennec remarked, that the bones lose nothing in length, but he frequently thought that their diameter was lessened. The medullary canal, in the long bones, is sometimes enlarged by internal absorption, the walls becoming as thin as paper, and the bones in general certainly lose in specific gravity. From the earliest period the hairs fall off, owing to atrophy of their bulbs; and the nails, if not previously incurvated, become so from malnutrition and atrophy of the matrix, and loss of substance in the fleshy parts of the fingers. If no efficient means be adopted to renovate the whole mass of deteriorated blood, the attenuation proceeds; the adipose and muscular tissues are rapidly absorbed; the nose becomes pointed; the eyes sink in the orbits, although they frequently "sparkle with a liquid lustre;" the temples become excavated; the jaws hollow; the integuments of the mouth are, as it were, stretched over the teeth, and the patient frequently exhibits a kind of ghastly smile; the skeleton projects more and more through the skin; the muscles of the arms become indistinct; there is no vestige of breast except the nipple; the ribs may not only be counted, but their terminations may be seen; neither their articulations at the vertebræ nor where they overlap the sternum are concealed; the intervals between them are hollow and curved; the joints of the legs, hips, and arms become prominent and devoid of flesh; and the spines of the vertebræ project from the wasting of the muscles on each side. The emaciation is also exemplified in a remarkable manner in the leanness of the fingers, the joints of which appear thickened, and, from the shrinking of the flesh, the whole finger resembles mere bones covered with transparent skin; the hypochondriæ are sunk and retracted; the epigastrium and flanks ad-

here, as it were, to the spine; and the whole frame appears to be wasted, except, perhaps, the lower extremities, which are œdematous towards the last,—a circumstance which frequently results from pressure on the iliac veins, owing to the absorption of the fat and cellular structure which surround them. In fine, the individual before death attains that degree of emaciation which in all probability led to the disease in its various forms, being called CONSUMPTION. This emaciation, and the structural changes described, are directly associated with, and explain most of, the functional derangements yet to be noticed.

Emaciation is so frequently the earliest appreciable sign of disease in tuberculous subjects,—it proceeds so progressively and uniformly from the commencement to the termination, it is so little related to the *extent* of local disease either in the lungs or elsewhere,—it is so directly related to the diseased condition of the blood,—that there can be no doubt it is, from the beginning to the end, symptomatic of the general disease. Local affections of the intestines—of the mesentery—of the lungs—or hectic fever, may precipitate it; but in instances where tuberculosis has pursued its course without a symptom of hectic fever, and where the vital organs have been only slightly affected, emaciation has reached its utmost limits before the death of the patient.

ON DIRECT DEBILITY AS A SYMPTOM OF TUBERCULOSIS.

The debility of constitution characterising the predisposition to tuberculosis, and exhibited in the weakness of the voluntary and involuntary muscular systems, the feebleness of respiration, the defective nutrition of the tissues, and the morbid irritability of the whole economy, have been already described. So long as the peculiarities of constitution which have this debility for their basis are within the range of a mere predisposition to disease, the organic and animal functions — digestion, sanguification, secretion, excretion, the muscular, sensorial, generative, and intellectual functions and faculties—manifest a sufficient degree of order, regularity, and vigour, to constitute the ordinary state of health in the individual; but when tuberculosis sets in as a disease, this debility assumes a more definite form, and in several of its effects becomes a real diagnostic symptom. Observation accordingly shows that when, by the efflux of time, blood originally tuberculous, and also when, by the operation of the ordinary tuberculosis, either tainted blood or blood totally exempt from a tuberculous taint, becomes so much deteriorated as to produce the malnutrition already described, the anæmia and wasting are accompanied by this debility, and the debility of tuberculosis then becomes one of its most important symptoms.

The debility exhibited by tuberculous subjects is unquestionably both *direct* and *indirect;* but I believe, as a diagnostic symptom, it is the direct debility which most especially demands consideration. Like the anæmia and emaciation this direct debility is amongst the earliest and most constant symptoms. In by far the greater number of cases it commences insidiously and proceeds gradually, never ceasing till the disease itself is terminated. Even Bennet, the earliest English authority on consumption, saw the true bearing of this symptom: — "*That languor which slowly steals upon consumptive people without any decay of the lungs or other viscera, is to the English most dangerous; and unless remedies immediately take place* (*which they seldom do*), *is mortal.*"(a) It generally proceeds in an equal ratio with the emaciation, but is sometimes manifest to the patient himself long before the wasting is detected. Sometimes it is barely appreciable, the patient only experiencing a little more fatigue than usual on ordinary exertions. Occasionally, after a continuance of longer or shorter duration, it appears to be and really is suspended; but this always follows the arrest of the progress of the emaciation, and is a real suspension of the disease; the subject of it, who had, perhaps for a long time been losing health and strength, recovering both and resuming his usual habits or occupations, from a change in hæmatosis. This debility has several most important manifestations, which become symptoms of the disease.

a. In the Voluntary Muscular System there is a diminution of tone of the muscular fibres, and a consequent defection in the power and actions of the various muscles, that is to say, in the organs or instruments of motion. It happens, by no means infrequently, that the first symptom complained of by a tuberculous patient is an inability to take the accustomed amount of exercise; or excessive fatigue on slight exertion; or, without any complaint being made, the friends of the patient will observe an aversion to motion and a great inclination to sedentary habits. Muscular exertion, also, frequently produces a slight cough, merely from debility of the respiratory system. The waste of the muscles is, in some measure, accounted for by this defection in the manifestation of power,—as a particular muscle wastes in consequence of the inactivity of a limb, so the general debility of the whole frame, by occasioning general inactivity, favours the waste of all the muscles of voluntary motion; but I shall have occasion to state that this inactivity is not the sole, nor, in fact, the primary cause of the debility and waste in question. This debility of the voluntary muscular system is also frequently indicated, particularly in young persons, by the position they habitually incline themselves to, which is one of flexion or relaxation, preferring the recumbent or sitting posture, and, when in the latter, presenting a peculiar bend of the spine and chest forwards, selecting such occupations as can be followed in that position,—as reading at a desk or table, frame-work, knitting, &c., and continuing them for hours together almost involuntarily, or with an unconscious disinclination to assume the erect attitude or take walking exercise.

b. In the Involuntary Muscular System, debility is marked by the dilated pupil already noticed, the debility of the muscular coat of the alimentary canal ancillary to those dyspeptic symptoms presently to be mentioned, and by the state of the pulse and the respiratory functions.

A Weak Pulse.—The state of the pulse has been regarded by some practitioners as the pathognomonic symptom of the tuberculous cachexia. Without regarding it as such in relation to tuberculosis, viewed as an idiopathic disease of the blood, inasmuch as very remarkable exceptions occur, it is still one of the most invariable and most important of the symptoms. Its great characteristics are weakness and frequency; but, in uncomplicated tuberculosis, the frequency is much less constant than the weakness. The frequency is particularly manifested towards evening, and readily excited by the most trivial causes, and it is most remarkably dependent upon mental impressions, and sometimes excited in the most extraordinary manner by moral causes. Although the pulse is very often weak, and always frequent, the frequency being aggravated by such causes, yet, according to my own repeated observation, where I have had no doubt of the existence of tuberculosis, without any local disease having yet manifested itself, the pulse has been weak and *slow*, but, at the same time, very easily hurried. The mere circumstance of laying the finger upon it to make an observation has been sufficient to quicken it, as happens in the case of patients essentially nervous without any disease of the blood. Under no circumstances has the tuberculous pulse the strength or the hardness of inflammation, when diseases of this class occur in subjects whose blood is healthy, neither has it the degree of weakness nor the smallness of low fever. It has been remarked, that this state of the pulse reveals more than the muscular debility or the emaciation. It exhibits a peculiar state of the irritability of the living fibre, attended with loss of power, and depending upon the malnutrition already described, and the morbid condition of the blood. It points to a modification of the reciprocal molecular actions between blood and tissue, and a corresponding change in the resultant powers of life; the action of the heart being the most accurate measure of these powers. This frequency of pulse by no means indicates increased velocity of circulation; for, although difficult to estimate, it is probable that more than the circulation gains by the increased *number* of the heart's contractions, it loses by the diminished *force*, and the state of the tissues generally indicates a languid circulation. In tuberculosis, there exists an unmistakable diminution of the vital powers; and this, as measured by the action of the heart and the state of the pulse, may be placed as a diagnostic sign, in reference to the general disease, upon a level with percussion and auscultation, in reference to that variety of it which is produced by local changes in the lungs.

c. Smallness of Respiration, and Diminished Vital Capacity of the Lungs.—With the condition of the pulse already described, a small quick respiration may be constantly observed as symptomatic of tuberculosis, and demands the most accurate and most watchful attention of the practitioner. No doubt this symptom is more decidedly marked where there is a tendency to disease of the lungs, and where

(a) "Tabidorum Theatrum, item Vestibulum Tabidorum." 1654—6.—*Eng. Tr.* 1720. Pp. 158.

the nutrition of these organs is more especially involved. But, in the earlier stages, it is by no means dependent upon local tubercular disease of the organ. The breathing is, on the contrary, confined, or short and increased in number, without any further affection of the lungs than appertains to the general disease. It depends upon various causes,—the malformation and contraction of the chest, belonging to the predisposition,—the morbid nutrition and debility of the cellular and muscular systems generally, and the weakness of the respiratory muscles in particular,—the debility of the pulmonary circulation,—and the debility and irritability of the heart. The habitual or ordinary respiration corresponds with the excitability of the pulse in being easily hurried into dyspnœa, under the influence of comparatively trifling mental or physical exertion.

This symptom of tuberculosis has been studied too exclusively in connexion with disease of the lungs. I consider it of paramount importance in relation to the primary disease of the blood. The inspiratory and expiratory motions being accelerated but small, or small without being accelerated, indicates that the function of respiration, measured by the extent of these motions, is below the standard of health; the frequency of motion by no means compensating for the loss of extent. It shows a diminution of the *vital capacity* or *breathing power* of the lungs, which occurs, in tuberculosis, before any deposit or appreciable organic disease in these organs.

The feebleness of respiration, indicative of a diminished vital capacity, the practised observer will frequently detect with the unaided eye; but all observations of this kind must be vague and indefinite. Several plans have lately been proposed for the purpose of measuring more accurately the vital capacity of the lungs. One method is, to measure the mobility of the walls of the chest, since this corresponds very closely with the actual breathing power.

The mobility may be measured by a common tape-measure. The minimum circumference of the chest over the nipples, after a forced expiration, and then, after causing the chest to be fully expanded, the maximum circumference, should be noted. The difference is the mobility of the chest. In health this varies from 2¾ inches to 4 inches, and when reduced to less than two inches, according to Dr. Hutchinson's observations, it looks suspicious as respects the existence of local disease. A smaller diminution than this, but at the same time a very decided diminution of the mobility of the chest, corresponds with the debility of tuberculosis, independent of local deposit in the lungs. This method enables us to form a rough estimate of the vital capacity of the lungs, and I have found it practically useful; but there are numerous qualifying circumstances relating to the motions of the chest which ought to be taken into the account before any conclusion can be drawn from the results which it furnishes.

Dr. Sibson has invented an instrument, called a chest measurer, for the purpose of determining more accurately the mobility of the chest; it is described in the "Medico-Chirurgical Transactions." (a) Dr. Hutchinson, Dr. Sibson, MM. Beau and Maissaiat and M. Bourgery (b) have also made some very important observations on the mobility of the chest and the vital capacity of the lungs. (c) These observations are not generally embraced in works on physiology, but they involve considerations of paramount importance in the diagnosis and treatment of tuberculosis and its varieties. I propose, therefore, to recapitulate some of the more important points.

In all cases of doubtful or incipient tuberculosis it is essential that the mobility of the chest should not only be observed on the earliest presentation of a patient, but that it should be carefully watched. When the chest, during ordinary respiration, exhibits, either from habit or the position incidental to a particular occupation, a remarkable quiescence, and an inclination to maintain such postures as are favourable to that quiescence, the necessity of this vigilance becomes greater. On watching such patients, the diminution of respiration may sometimes be observed with the eye alone; but, for the purpose of determining it more accurately, I have adopted the use of Dr. Sibson's chest measurer.

I cannot, at present, boast either much experience or great expertness in the use of this instrument; but, whatever plan may be resorted to, before we appreciate the indications furnished in disease we must be aware of the degree and gradations of the chest's motion in health. The subject is by no means thoroughly understood, but many of the points determined by the physiologists quoted are of the greatest importance.

The mobility of the chest has three types: the superior thoracic, the inferior thoracic, and the abdominal. According to Dr. Sibson, the extent of the forward motion of the thoracic and intermediate ribs from the first to the seventh, (superior thoracic), during an ordinary inspiration, in a healthy robust male, varies from 0·02 to 0·07 of an inch; the extent of the motion in a deep full inspiration varies from half or five-sevenths to two inches. The extent of the motion of the diaphragmatic or lower ribs, (the inferior costal or lateral expansion or type,) is, in an ordinary inspiration, greater, and in a deep full inspiration usually less, than that of the forward motion of the upper part of the chest. The ordinary diaphragmatic movement (abdominal type) is from 0·25 to 0·3 of an inch; the extreme being from 0·6 to 1·6 of an inch. The expansion of the second ribs is usually equal on both sides of the chest; but below these, all the inspiratory movements, especially those over the heart, are somewhat less on the left than on the right side, both during ordinary and extreme full inspiration.

These movements present numerous variations in health. In infants the thoracic expansion is proportionately increased, being from 0·02 to 0·12 of an inch, while the abdominal is from 0·06 to 0·15 of an inch; the lower end of the sternum and the adjoining ribs usually receding on inspiration, especially if the abdomen be large, and the inspiration quick and sobbing. In youth, owing to the greater flexibility of the costal cartilages, the extreme movement of the thoracic ribs is greater in proportion to the breathing capacity than it is in the adult, the upper end of the sternum advancing more than the lower during a deep inspiration, but there is little difference in ordinary inspiration; the motion of the sternum is also usually less than that of the ribs. In old age, owing to the consolidation of the cartilages, the motion of the sternum during inspiration is usually greater than that of the ribs, and the lower end of the sternum usually advances more than the upper end.

In females, the thoracic expansion is exaggerated, while that of the lower ribs and diaphragm is restrained. Dr. Sibson thinks this is owing, in great part, to the use of stays,—the difference being much greater when the stays are on than when they are off. Messrs. Beau and Maissaiat recognise a more decided superior thoracic type of respiration in the female; but, with Dr. Hutchinson, these physiologists attribute little or no effect to the stays, since it is observable before stays have been worn. (a) When the stays are on, according to Dr. Sibson's measurements, the thoracic movement at the second ribs is from 0·06 to 0·2 of an inch, the restrained abdominal movement being from 0·06 to 0·11; when the stays are off the movements are 0·03 to 0·1 of an inch and 0·8 to 0·2 of an inch respectively. During a deep inspiration, the restrained motion of the lower ribs is much greater when the stays are on than when they are off.

In observations on the mobility of the chest, Dr. Hutchinson remarks, that great caution is necessary to allow for a peculiar compensating power possessed by the respiratory function, which adapts itself for drawing in any quantity of air by modified movements to answer certain changeable conditions of the economy relating to diet, digestion, sanguification, fasting, sleep, temperature, season, the purity of the atmosphere, &c. For the purpose of estimating the value of modifications of the mobility of the chest throughout tuberculous diseases, it is also necessary to bear in mind those which result necessarily from the anatomical peculiarities of the skeleton described in a former lecture; as, for instance, the curvatures of the spine, and also the effects of diseases and injuries of the ribs and apparatus of motion, by which the motions of the chest may be permanently restrained or exaggerated; the effects of diseases of the abdominal organs in restraining the action of the diaphragm; also the effects of the various diseases of the chest which occur in tuberculosis, or independent of this disease.

Making allowance for all these circumstances, and apart from any local disease or pathological condition influencing the mobility of the chest, I believe, that in a tuberculous

(a) Vol. XXXI., p. 354.
(b) Archives Générales, Dec. 1842, July and March, 1843.
(c) Idem, March, 1843, p. 375.

(a) "Archives Générales," p. 397. Dec., 1842.

condition of the blood, the natural slight mobility of the upper part of the chest is for the most part materially diminished, and that the loss of mobility of the chest is in direct relation to a diminution of the breathing capacity. My opinion is formed more from observation with the eye and touch than from actual measurement with Dr. Sibson's instrument. Dr. Sibson states that he has not examined cases even of incipient phthisis; I find, however, that he gives cases where the mobility of the chest was small without thoracic disease, as in a pallid boy, aged ten years, with a diseased knee; attributing the diminution of respiration to loss of practice in the exercise of the ribs. I submit whether the loss of practice as well as the loss of mobility is not symptomatic of a tuberculous state of the blood.

Dr. Sibson remarks that when the capacity of the lungs is diminished, the increase of motion on forced inspiration, compared with the motion in ordinary inspiration, is in a proportionate degree diminished. Thus, in a man who could inspire only 170 cubic inches of air, the ordinary mobility was only 0·03 to 0·07 of an inch, and the deepest inspiration only 0·5 of an inch; whereas, in a man who could inspire 290 cubic inches, the mean mobility of the ribs in tranquil breathing was 0·05, and in deep inspiration 2½ inches. When a loss of mobility of the chest on ordinary inspiration occurs as a symptom of tuberculosis, the expansion of the chest during a forced inspiration is diminished in a proportionate degree. This symptom I have detected absolutely in several instances associated with other symptoms, rendering the case unequivocally tuberculous, but in which auscultation and percussion gave not the slightest indication of local disease.

[To be continued.]

ORIGINAL COMMUNICATIONS.

REPORT ON CHOLERA, AS IT OCCURRED IN CEYLON IN 1819.

By JOHN DAVY, M.D., F.R.S., &c.,
Inspector General of Army Hospitals.

[This Report, in the form of a letter, was made by the author when Acting Physician to the Forces, to Dr. Farrell, Deputy-Inspector of Hospitals, then in charge of the Medical Department in Ceylon. It is submitted for publication with the belief that parts of it,—especially those relative to the condition of the air required, the quality of the blood, venous and arterial, and the state of the muscles after death,—may, even after the lapse of more than thirty years, possess some interest, and be suggestive of further inquiry.—J. D.

Lesketh How, Ambleside, August 27, 1850.]

In compliance with the wishes expressed in your circular letter of the 26th of May, I have the honour in the present communication to address you on the subject of the epidemic cholera, which, in common with a great part of India, lately prevailed in this island. I may premise, that the opportunities I have had of observing the disease, have not been very numerous; altogether I may have seen about forty cases of it, the majority of which were among the natives.

1. In most instances the attack of the disease has been sudden,—not preceded by any warning: a man has left his house in the morning to follow his usual occupation, apparently in robust health; he has been attacked by cholera as if struck by lightning, been carried home in an alarming state, and often before night he has expired.

2. Predisposition to the disease may exist in some habits; it is reasonable to suppose it does, but what the nature of the predisposition is I must confess myself perfectly ignorant. The feeble and ailing have been spared, whilst the robust and healthy have suffered,—the temperate man has been attacked, and the drunkard has been passed by. The indigent poor among the natives have certainly suffered most, but they form the great mass of the people, and I am not aware of any documents to prove that they have suffered in a greater proportion.

3. The symptoms of the disease in the cases that have come under my observation, have exhibited some variations. They may perhaps be divided with advantage into those that have occurred generally in every instance,—those that have occurred occasionally,—and those that have occurred only in particular instances.

The most general symptoms of the disease have appeared to me to be an extraordinary sinking of the pulse, diminution of muscular power, and sudden cooling of the body. Without these symptoms I have not seen a single case of the disease; indeed, were the pulse natural, and much more were it strong, one would hesitate in allowing, and perhaps refuse, to acknowledge the case in which it occurred to be an instance of the epidemic.

The occasional symptoms of the disease were, according to my observations, a slight purging, slight retching or vomiting, and painful spasms of some of the muscles. Occasionally all these symptoms have been present at the commencement of the attack; but, with the exception of spasm, they have not been obstinate, and have readily yielded to opium; the disease continuing its progress. And in two or three instances I have not observed any of these symptoms at any period of the disease. The minor occasional symptoms of the disease in the cases I have attended, have been, at its commencement, restlessness, agitation of mind, sensation of cold, a foul tongue; in the advanced stage, confusion of intellect, tendency to sleep, sometimes amounting to coma, diminished sensation.

I shall detail a very few cases as examples of the principal varieties of the disease I have met with, and I shall extract them from my note-book.

Case 1.—Daniel Vandart, aged about 35, a man of colour, of the class commonly called Portuguese, of a robust frame, a butcher in very good circumstances, inhabiting the Pettah of Colombo. On the 27th January last, at eight o'clock in the morning, he left his house, and went into the Fort. At ten o'clock he suddenly became very weak. He was seized with cramps in the calves of his legs, and with vomiting and purging. At two o'clock in the afternoon he was seen by the assistant apothecary, Mr. Kellert. Mr. Kellert found him in a very alarming state; no pulse at the wrist; the action of the heart not perceptible; the skin covered with sweat; spasms—and those severe—of various muscles, as of those of the legs, arms, and abdomen. Neither purging nor vomiting urgent. T. opii gtt. xl. were administered. At three o'clock I visited him. I could perceive no pulse of the heart or arteries; the extremities were cold, and the whole surface of the body cool and bathed in sweat; even the axilla felt cool; the thermometer placed in it did not rise above 96 deg.; under the tongue, it was stationary at 97 deg. I asked him if he felt any uneasiness about the chest. He replied "No." His breathing was quick, (about 34 in a minute,) but not laborious. He said he had no fixed pain anywhere; nor was pain produced by pressure on the abdomen. Cramp occurred frequently in different muscles, particularly of the inferior and superior extremities, and of the abdomen, and once whilst I was present the muscles of the face were severely affected, as in trismus. The spasms were of short duration. They were so painful, that, under the agony they occasioned, the patient cried aloud. The tongue was clean. He was rather thirsty, and often called for water. Whilst I was with him, (about an hour,) he had no vomiting or retching, or evacuation from the bowels; an enema that was prescribed and given was not retained. His expression of countenance was wild; his eyes a little sunk; his features not collapsed; his manner agitated; his intellect clear. At four o'clock I left him, when he appeared a very little better; he was more composed, and his pulse now and then was just perceptible. At eight o'clock he expired. He was conscious nearly to the last moment. Little change of symptoms occurred in the interval between my visit and the patient's death. There was no return of vomiting or purging.

Case 2.—A palanquin bearer, aged about 25, an active short Singalese, was attacked at Colombo, on the 25th March, in the morning; in the afternoon he was brought to the Pettah Hospital. On his arrival, the symptoms of the disease were severe. No pulse could be perceived; he was in a state of great debility; his extremities were cold; his trunk warm; he was bedewed with a cold sweat, and was suffering from cramps of the extremities, particularly the lower. Before admission, he had vomited two or three times, and had as many liquid stools.

March 26.—No pulse has yet been felt, (twenty-four hours have elapsed;) extremities still cold. He has experienced no return of the cramps or of the vomiting; three liquid stools resembling chyme, containing two round worms. He is perfectly conscious.

March 27.—Yesterday afternoon his pulse re-appeared; his skin became warmer. Now his pulse is very distinct, and not very rapid; some little appetite; he complains only of debility.

April 3.—He was discharged to-day, perfectly recovered. During his convalescence he did not experience any febrile symptoms or morbid heat of surface.

Case 3.—A native woman, aged about 20, frame slender, previously in good health, in the middle of the night of the 26th February, at Colombo, awoke with a feeling of indisposition; in the morning she found herself unable to walk, from extreme debility. In the course of the forenoon, she vomited a little, and had two or three liquid stools. At two o'clock in the afternoon she was brought to the Pettah Hospital. No pulse could be felt; the skin was cold, and covered with a cold sweat; no cramps—she had experienced none from the beginning of the complaint, and it terminated without any; she was conscious. She complained of no particular pain or suffering. At four o'clock she expired.

Case 4.—A horse-keeper, aged about 25, a well-made, active man, resident at Colombo; on the 16th of February he was quite well; on the 17th, about five o'clock in the morning, he suddenly became ill. Between the hours of five and seven, (at the latter of which he was brought to my house,) he had vomited a little, and had two or three liquid stools; and had experienced cramps in the legs. When I was called to see him, I found him sitting, his back supported against the wall of the room. I could perceive no pulse; his breathing was a little quicker than natural; his extremities were very cold, as was also his body; and he was covered with a cold sweat. He was perfectly conscious; made no complaint of pain, or, indeed, of any kind. Having given him a stimulating draught containing opium, I ordered him to be taken to the Pettah Hospital. To my surprise, the man stood up, and, with a little assistance, walked out and proceeded about twenty yards, and sat down a few minutes under the shade of a tree, whilst bearers were collecting. Without loss of time, he was conveyed to the Hospital, which was little more than half a mile distant, but he did not reach it alive.

Case 5.—A Kandyan woman, aged about 17, of a healthy constitution, in good circumstances, (at Fort Macdonald, where I saw her in passing,) was in perfect health on the 15th of April. On the night of the 16th, she was seized with retching, and vomiting, and slight diarrhœa. On the 17th, in the morning, at eight o'clock, her pulse was very quick and feeble; much prostration of strength; the body cool, the extremities almost cold; the retching, vomiting, and diarrhœa troublesome; no pain of abdomen; no cramps. In this state she continued the whole of this day. On the day following the symptoms abated, and her recovery was rapid.

In describing these cases I have mentioned, in one instance only, the expression of the countenance. In the disease in general it is peculiar; it is commonly wild, anxious, and haggard, and the more so generally in proportion to the degree of danger,—the features being at the same time collapsed, exhibiting frequently in a few hours a complete facies hippocratica.

The treatment pursued in all these cases was much the same as that which will be described as I proceed.

4. The opportunities I have had of investigating the nature of the disease by dissection have been few, and not exceeding four in number. I shall briefly describe what I observed in each worthy of notice.

1. *The Body examined Twelve Hours after Death.*—The vessels of the brain unusually turgid with dark-coloured blood; about an ounce of serum in the ventricles and at the base of the brain. In the stomach and intestines a good deal of air. The villous coat of the stomach of a pinkish hue. The peritoneal covering of the intestines, and particularly of the smaller intestines, redder, and perhaps more vascular than natural. The liver rather pale and soft. In the gall-bladder the usual quantity of bile of its natural appearance. The spleen rather large; the abdominal muscles, and the muscles in general, very red and tender.

2. *The Body examined Fifteen Hours after Death.* — The brain not inspected. The lungs very full of blood, which appeared to be fluid. About three drachms of serum in the pericardium; the veins of the heart distended with blood; a good deal of blood in the cavities of the heart, and in the ascending aorta; the blood dark coloured, very little of it coagulated; the lining membrane of the heart and aorta, where in contact with the blood, of a bright red, apparently stained. The substance of the heart remarkably soft, especially that of the left ventricle, more resembling liver than muscle, not offering more resistance, and breaking on pressure with as much facility. The muscles in general of the body appeared to be softer, but not redder than usual. The villous coat of the stomach here and there exhibited red patches. The peritoneal covering of the small intestines rather more vascular than usual; a whitish fluid, like chyme, in the large intestines. The liver and spleen, like the lungs, gorged with fluid blood. The bile in the gall-bladder natural in appearance and in quantity.

3. *The Body examined Fourteen Hours after Death.*—The pia mater apparently very vascular. A good deal of serum between the membranes, in the ventricles, and at the base of the brain. The left lung gorged with serum and blood. The substance of the left ventricle of the heart unusually soft and friable; that of the left auricle rather less so, and that of the right ventricle still less. Very little blood in the heart; a good deal in the great vessels, and only slightly coagulated. The muscles of the chest and abdomen red, pretty firm. The peritoneal covering of the intestines perhaps a little more vascular than usual. Some mucous fluid in the stomach; on its villous coat here and there red spots, but no decided marks of inflammation. A few red spots on the mucous membrane of the small intestines. The bladder of urine very much contracted, and its inner coat rather vascular. The bile and the viscera not mentioned exhibited no unusual appearance.

4. *The Body, examined Fourteen Hours after Death.*—The brain not inspected. The lungs healthy; perhaps a little more blood and serum than usual in the left lung. About ½ oz. serum effused into the pleura. About 2 oz. of serum in the pericardium. A little blood in the cavities of the heart. The substance of the heart unusually soft and friable, and particularly that of the left ventricle. A considerable quantity of half-digested food in the stomach. A good deal of chyme in the small intestines. Several round worms in the large and small intestines, and in the latter very many ascarides, (*Tricocephalus dispar.*) No marks anywhere of inflammation: the abdominal viscera healthy; the bile natural.

In these instances, the most remarkable circumstance that occurred on dissection was the state of the heart and muscles, resembling the state they are said to be in in animals killed by electricity or hunted to death.(a) As many hours elapsed before the inspection of the bodies was made, it may be supposed that the weakness of the muscular fibre may have been owing to incipient decomposition, and that the same state of muscles would be observable in the bodies of persons dying of other diseases after the same lapse of time.

The former supposition may be correct; in all probability, the unusual weakness of the muscular fibre is owing to incipient putrefaction. But the latter supposition I do not believe to be just; for, in other instances, when bodies that have died of ordinary diseases have been kept as long and longer, I never witnessed anything of the kind; and, as an experiment, at the season that cholera was prevailing, I purposely deferred the inspection of the body of a native, who had died of dysentery, twenty hours, and I then found the substance of the heart firm and strong, and the muscles in general as they usually appear. Were the heart and muscles discovered, in every fatal case of the disease, to be in the state above described, an important fact would be established,—there would be little doubt relative to the seat of the disease. I have made inquiries of a few medical friends, who have had a good deal of experience in the disease, what their observations have been on the subject. According to their statements, they have not corresponded with mine; still I am far from certain that they would disagree, were they made under the same circumstances, and were their attention particularly directed to the point in question.

5. The observations I have to offer relative to the state of the secretions in this epidemic, are not nearly so numerous or so minute as I could wish.

In no instance have I seen the bile vitiated; nor am I aware of its being deficient in quantity, or excessive. I am disposed to think, that neither it nor its secreting organ is immediately concerned in the disease. In the evacuations,

(a) Since disproved: see Hewson's Works, edited by Mr. Gulliver for the Sydenham Society, p. 20—21, notes.—J. D.

both sursum and deorsum, rather a deficiency than an excess of bile has been commonly observed. But, as bile in its usual quantity has been found in the gall-bladder after death, the deficiency in the evacuations cannot logically be connected with diminished secretion.

In investigating the nature of the disease, it appeared to me of some moment to attend, not only to the appearance of the venous blood, but to that also of the arterial; and to observe, at the same time, the condition of the air expired. The importance of this part of the inquiry occurred to me at Kandy, in the latter end of April, when I was returning from a tour I had made in some of the distant provinces of the interior. I communicated my ideas on the subject to my very intelligent and worthy friend Mr. Finlayson, now assistant-surgeon of the 8th Dragoons. He entered into my views with zeal, and very kindly gave me his assistance. During the few days I stopped at Kandy we had an opportunity of making one experiment. The subject of it was a Caffre, who had been brought in from Mateli labouring under cholera. He had experienced some vomiting and purging; he was conscious but could not speak; his extremities were cold; his body cool; a thermometer put under his tongue was stationary at 94°, and in the axilla at 93°; skin dry; his pulse was very small and quick; his breathing not laborious. To ascertain the effect of respiration on the air he expired, we made him breathe into a collapsed bladder, and tried the air by means of a strong solution of caustic potash. We made a similar experiment on the air expired by a healthy Caffre. The latter contained five times more carbonic acid than the former. We did not possess means to ascertain the absolute quantity. At my desire, Mr. Finlayson was so good as to continue the inquiry at a time I had no opportunity of following it myself. In every instance (and he has tried the experiment in several) he has found the air expired very deficient in carbonic acid, and he has observed little or no difference in the appearance of venous or arterial blood. Some observations of his which he favoured me with in a letter, dated Kandy, 4th June, are very precise on this subject; I shall take the liberty of quoting them. He says:—"I have repeated the experiment in question on a pioneer, with the following results: he had been about six hours ill with cholera. Temperature under the tongue 91°, in the axilla 92·5°. Pulse small, feeble, but distinct; in frequency, 90. Blood from the temporal artery flowed feebly *per saltum*. It was received in glass vessels. It appeared of a very dark colour; coagulated readily; contained a small portion of whitish serum. Blood from a vein in the arm, taken at the same time, flowed very slowly, and in a very small stream. It coagulated readily; its colour was very dark; there was no separation of coagulable lymph, and only of a very small quantity of serum. There was scarce any difference in colour of the arterial and venous blood; if any, the margin of the glass containing arterial blood was of a lighter shade than that containing venous: it was difficult to distinguish the one from the other. The air expired from the lungs was examined in the manner you suggested. Compared with that expired from the lungs of a healthy person of the same race and country, the former seemed to contain only one-third of the carbonic acid in the latter."

In no instance that I have heard of has the blood taken from the vein of a person labouring under this disease exhibited a buffy coat.

6. Relative to the *lædentia* and *juvantia* in the treatment of this disease, my own experience is very limited. I have never employed venesection. Opium combined with calomel in large doses; gentle friction of the body with oil of turpentine; bottles of hot water to the extremities; hot fomentations to the abdomen; the warm bath; one or two enemata, composed of castor oil, oil of turpentine, and laudanum, at the commencement, and frequent injections of hot rice-water, through the course of the complaint, are the means I have most commonly had recourse to in combating this disease. This method of treatment, in many instances, appeared to do good; in no one instance was I conscious of the symptoms being aggravated by it. In the Pettah Hospital, under my direction, it had a pretty fair trial. In that excellent charitable institution, from the latter end of January to the latter end of May, twenty-one cases of cholera were admitted, of whom eleven died and ten recovered. Now, taking into consideration, that three or four of the poor wretches were brought in moribund, on comparing this result with the general mortality in Ceylon, I think I may venture to draw a conclusion in favour of the practice followed.

The diminished action of the heart often amounting to apparent cessation seemed to indicate the use of electricity. In two instances I tried the effect of voltaic electricity passed through the chest from a small battery composed of thirty double plates, each 4 inches square. In one case it appeared to do good,—certainly the pulse rose under its influence. In the other it had no apparent effect; indeed, no effect could be expected; for, before the apparatus was ready the patient was moribund. I regret much I could not command a greater electrical power. I am much disposed to think it would have proved highly serviceable; at all events, the result would have been of importance in the investigation of the exact nature of the disease.

After I had found, by experiment, that in respiration, in this disease, very little carbonic acid is formed, it occurred to me, that oxygen gas and stimulating vapours, as the vapours of ether and ammonia, might be inhaled into the lungs with a prospect of some advantage. I have yet had no opportunity of making trial of their effect. Mr. Finlayson, from the effect of the fumes of the subcarbonate of ammonia, in three cases, is disposed to think favourably of the method; two of the three recovered, and, even in the case that proved fatal, the fumes appeared to be of some service.

7. I am not acquainted with any facts that throw the least light on the cause of this epidemic. Between the months of January and June that it prevailed in the island, I had opportunities of observing how very various the circumstances were under which it occurred at the same place at different times, and in different places at the same time. It appeared to be quite unconnected with the direction of the wind, with the dryness or moisture of the air, with heat or cold, with elevation or lowness of situation, with salubrity or unhealthiness of climate. Were it not, that the details would occupy a great deal of space, I might mention facts that I collected in the tour I made into the interior of the island in the months of March and April, to prove that the cause of the disease is not any sensible change in the state of the atmosphere;—so much so, indeed, that were one guided by reasoning alone, like Sydenham in the instance of the fevers of his time, we would be led to conclude, that its cause is either miasmata, extracted from the bowels of the earth, the effect of an intestine motion, or emanating from above in consequence of some peculiar conjunction of the heavenly bodies. At present, perhaps, we had better confess our ignorance on the subject. Yet, considering the progress of the disease, its epidemic nature, the immense extent of country it has spread over, we can hardly hesitate in admitting the cause of it to exist in the atmosphere. It may be extricated from beneath the earth's surface; it may be generated in the air; like heat and light it may be capable of radiating through space, independent of currents of air; like electricity it may be capable of passing from place to place in an imperceptible moment of time; thus we may throw out conjectures, and with Sydenham say, "at vero, quæ, qualisque sit illa aeris dispositio à qua morbificus hic apparatus promanat nos pariter ac complura alia, circa quæ vecors et arrogans philosophantium turba nugatur plane ignoramus."

What is the seat of the disease? What its exact nature? Whether the name "cholera morbus" is appropriate? Whether it is to be classed with cholera, or requires a distinct place in nosological arrangement? — are important points for consideration which I must avoid, as involving general investigation of the subject foreign to my present object.

AN ACCOUNT OF A TUMOUR REMOVED FROM THE NECK.

By ALEXANDER URE, Esq.,

Fellow of the Royal College of Surgeons and Surgeon to the Westminster General Dispensary.

A boy, seven years of age, of pale complexion and emaciated form, came under my care with a prominent and globular tumour, about the size of a common orange, situate behind

the right clavicle, and on the acromial edge of the sterno-mastoid muscle (as figured in the annexed cut.)

The tumour extends backwards to the margin of the trapezius, and is lapped over by some of the fibres of that muscle. It is solid and elastic, smooth on the surface, and, although rather deeply imbedded in the subjacent parts, is slightly moveable. It is thinly covered by integument, which is traversed by veins, and is nowhere firmly adherent,

The tumour measures from before backwards about 7½ inches, and laterally about 4 inches.

It is free from pain, and inconvenient only on account of its bulk.

It was first perceived when he was six months old, of the bigness of a pea, and has since progressively increased.

Various topical and internal remedies were resorted to without effect. On two occasions punctures were made into the growth by a surgeon, but a drop of blood merely oozed from the punctured orifice.

On the 18th of July, 1850, I removed the tumour in presence of my colleagues and several other professional friends.

The boy was placed upon a table of the ordinary height, in a recumbent posture, a little inclining to the left side, so that the light fell obliquely upon the neck, and was rendered insensible by chloroform.

I commenced by a free crucial incision, and dissected the integument from the platysma myoides. This, together with the superficial fascia, was next divided, when the tumour was brought into view. By cautiously dissecting from above downwards, and insinuating the finger behind, so as to separate its cellular attachments from the adjunct parts, the tumour was without much difficulty dislodged, along with a portion of the deep fascia of the neck to which it was intimately adherent. This exposed the sheath containing the carotid artery, with which the tumour had been in close contact. The subclavian vessels were immediately underneath its clavicular portion.

Very little blood was lost during the operation. Two small vessels were tied. The incised edges were united by means of interrupted sutures; a compress of wet lint and a bandage completed the dressing.

The tumour weighed nearly six ounces. On examination, it was found to be enclosed in a thin membranous capsule. It was of an oblong shape, and, when cut into, presented a lobular fatty character, with a larger proportion of condensed cellular texture than is usually met with in such growths.

July 19.—He has passed a restless and feverish night, and is rather incoherent when spoken to. As his bowels had not acted, an aperient powder was prescribed.

July 20.—His bowels were relieved, but he has passed another restless night. However, after taking some breakfast, he fell into a sound sleep, and awoke in a perfectly collected state.

July 21.—On removing the dressings, everything seemed to be proceeding favourably. There was free secretion of pus, and no redness in or around the wound. Wet lint and a roller were re-applied.

July 25.—The wound has been dressed daily, and is contracting rapidly. On the 22nd the sutures were withdrawn, and to-day the ligatures have separated. The discharge of pus is diminishing.

July 28.—The wound is, in a great measure, cicatrised. He has been walking out of doors.

August 12.—The wound is healed, and the boy is in his ordinary health and spirits.

24, Bloomsbury-square, Aug. 15, 1850.

AN ACCOUNT OF THE CONDITION OF THE ARTERIAL SYSTEM OF THE LOWER EXTREMITY TWENTY-TWO YEARS AFTER LIGATURE OF THE FEMORAL ARTERY

By T. SPENCER WELLS, F.R.C.S.,
Surgeon Royal Navy.

During a recent visit to Pavia, Dr. Porta, Professor of Surgery in the University of that city, showed me an injected preparation of the arteries of the right lower extremity, which he had made twenty-two years after the femoral artery had been tied for the cure of popliteal aneurism. As some important principles may be illustrated by an account of this preparation, it may not be unworthy of the attention of the readers of the *Medical Times*.

A Milanese merchant, who had been healthy and robust up to the year 1824, when he was fifty-two years of age, became the subject of popliteal aneurism on the right side, in consequence of a fall which injured the knee. In 1825 the femoral was tied in the superior third of the thigh. The aneurism was cured, but the limb remained somewhat atrophied and weak. The patient walked in a halting manner, but remained in good health until 1847, when he died of pneumonia. The limb was carefully injected from the external and internal iliacs. The arteries were then most carefully dissected. The whole arterial system was in a normal condition, with the exception of the vessels affected by the operation from the iliacs to the tibials.

The femoral artery, which had become aneurismatic in the popliteal space, was obliterated both at the seats of the aneurism and of the ligature. From the superior portion, four inches in length above the ligature, arose four large branches. For about fifteen lines beneath their origin it was diminished to half its calibre; but it was not ligamentous, nor was it obstructed by an internal clot in the ordinary manner; but, like the finger of a glove, was closed at the extremity, leaving the canal open, so that it became filled by the wax injected. Ligamentous substance six lines in length connected the superior with the medial portion of the artery, or that portion between the two points of obliteration, which measured seven inches. Its apex was a closed sac, obstructed by a clot for about eight lines. The artery then became enlarged to its natural calibre, as far as the middle of the popliteal space, when it was contracted, and near the aneurism was again closed by an internal clot. This medial portion gave off in its course fifteen femori-popliteal branches of various sizes, most of them being much larger than natural.

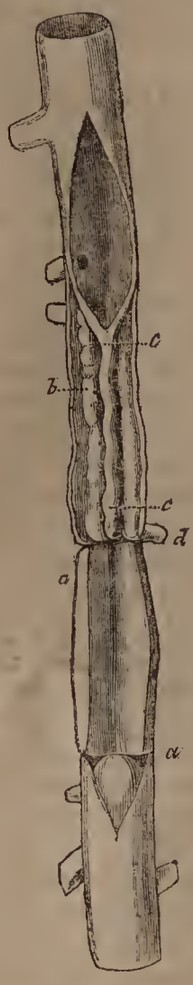
The situation of the aneurism was precisely between the superior and inferior articular arteries. It was shown by the existence of a solid fibrous cylinder, five lines in diameter and twelve lines in length. The popliteal artery, or what has been just described as the medial portion of the femoral, terminated in the superior part of this cylinder, and preserved the natural and distinct texture of the coats as far as the point of connexion, although it was occupied by a clot. The inferior portion of the artery was also connected to the cylinder below, preserving its natural calibre and texture. It was not obstructed by a clot, and after giving off with the inferior articulars, four branches, it terminated in the tibials.

In the great work of Professor Porta, on the ligature and torsion of arteries, made known to English readers in Dr. Forbes's Review about five years ago, the learned author demonstrated that in the lower animals direct circulation is

established after the ligature of arteries by the formation of new anastomotic branches between the separated portions of the tied artery and within the clots obstructing it. He had never been able to prove that the same conditions were observed in the human subject, but argued from analogy that it must be so. The preparation now attempted to be described proves this conjecture to be a positive and undeniable fact, as will be seen by a reference to the following wood-cuts, which give a very faithful representation of the manner in which direct anastomosis was carried on between the different portions of the obstructed artery.

Fig. 1.

Fig. 2.



From the superior portion of the artery (fig. 1 *a*), fifteen lines above the seat of obstruction, an enlarged branch arose. From the root of this branch a small vessel descended (fig. 1 *d d*) along the great trunk (*a*) and the ligamentous substance (*c*) to the apex of the medial portion (*b*), which it directly penetrated, and ran along the centre of the internal clot the length of seven lines. It then turned inwards to the first branch given off by the medial portion. The second figure shows the termination of the medial portion, or popliteal artery, in the fibrous cylinder (*a a*), which marks the situation of the aneurism. An inch before its termination its canal was obstructed by a clot (fig. 2 *b*), which concealed a new vessel (fig. 2 *c c*) ten lines long, and almost a line in diameter. This was continued above in the inner coat, and opened into the canal of the popliteal. Below, it passed behind the extremity of the clot, and united itself with the origin of the external superior articular (fig. 2 *d*), with which it was continuous. These two internal vessels, newly organised within the clots of the obstructed artery, were perfectly filled by the wax injected. Their walls were very thin, delicate, and transparent, so that they appeared much more slender than the external branches with which they were continuous.

The indirect collateral circulation need not be minutely described. In general terms, it may be said to have been carried on in two distinct circles; one around the seat of ligature; the other around that of the aneurism. The former was formed by the branches of the artery above the point of obliteration, some branches of the external circumflex, and the principal divisions of the perforating arteries, with the first five branches of the medial portion of the tied vessel. The latter circle consisted of the extreme ramifications of the external circumflex, three greatly enlarged anonymous popliteal branches, and the two superior articulars, with the inferior articulars, and the tibial recurrents, which had become much dilated. It is worthy of remark, however, that the anastomosing vessels were not only developed in the muscular and cellular tissues of the limb, but that the tibial and perineal nerves were atrophied, and converted into mere sheaths, containing and conducting large anastomotic arches. Probably the development of these vessels was the cause of the atrophy of the nerves, and consequently of the impaired nutrition and debility of the limb. It has been supposed that the indirect anastomosing vessels, by which collateral circulation is kept up after ligature of arterial trunks, are formed much more numerously and freely in the lower animals than in man; but their great number and size in this preparation would lead to the belief, that such is not the case. At any rate, careful injection and dissection of many limbs must be made before the truth of any such supposition can be demonstrated. However this may be, it is quite clear that surgical science has been enriched by a most important fact never observed before in human pathology, or, if observed, which is most unlikely, never recorded—THE EXISTENCE OF NEW AND DIRECT ANASTOMOSING VESSELS WITHIN THE CLOTS OF AN OBLITERATED ARTERY. It has also been more distinctly shown than before, that a great portion of the femoral artery may so preserve its calibre and permeability as to become anew the centre of circulation in the thigh, after a popliteal aneurism has been perfectly cured, in consequence of obliteration of the great trunk in the upper third of the limb.

August 8, 1850.

REMARKS ON THE ADMINISTRATION OF CHLOROFORM, IN ANSWER TO PROFESSOR LIZARS.

By JOHN SNOW, M.D.

Vomiting under the Influence of Chloroform attended with no Danger.—The Glottis not Paralysed.—Safety and Advantages of Chloroform, in large Operations, involving the Mouth.—Objections to Administering it on a Handkerchief.—Necessity and Advantages of an Apparatus.—List of Deaths from Chloroform.—Means of Avoiding all Danger in giving it.

I regret to differ in opinion from Professor Lizars on some practical points of his letter in the last number of the *Medical Times*, respecting the administration of chloroform; but, however unpleasant it may be to differ from so deservedly eminent a surgeon, it becomes the more a duty to correct what one believes to be erroneous, on account of the increased attention which his fame must command for his statements. What I conceive to be the errors in question appear to have arisen from Professor Lizars not having given the subject the amount of study and attention that it requires. He says, that those administering chloroform "have only to attend to two important points in order to insure safety to the patient. The first indication is to give directions to the patient that his stomach be kept empty." He proceeds to say, "for that reason operations should be performed before breakfast, as chloroform always produces vomiting when the stomach is full, and *the rejected fluid is liable to enter the paralysed glottis and produce suffocation.* To this cause I apprehend the great proportion of those who have died under the influence of chloroform may be ascribed." The *italics* are his own. I entirely agree in the propriety of an empty stomach preparatory to the inhalation of chloroform; but if any one thinks this a means of avoiding danger, he might be seriously disappointed in a case in which danger should really exist. I, as well as others, had been in the habit of directing patients not to take food for two or three hours before inhaling ether, and the same directions have been given since the introduction of chloroform. But it constantly happens that I have to give it to patients whom I have not seen before, and to whom the surgeon has omitted to give directions on the point, and not

unfrequently the patient has taken a meal just before I arrive; yet in no case has the inhalation been either postponed or omitted on that account. The patient is, indeed, liable, though by no means certain, to vomit when the stomach is full, but the vomiting has not, in any case, been attended with ill consequences of any kind, and I have seen, at least, two hundred patients vomit whilst partially under the influence of chloroform. In two or three cases, in fact, the patients who had eaten a very full meal, vomited and inhaled by turns during the whole operation. If the rejected fluid were liable to enter the glottis, of course there would be some inconvenience, either at the time or afterwards. As Professor Lizars is so afraid of the patient having food in the stomach before inhaling, it may safely be assumed, that his experience of vomiting, after chloroform, is by no means so large as that stated above. As regards his apprehension, that the great proportion of deaths are due to this cause, the simple answer to it is, that the patients who have died from the effects of chloroform did not vomit, and that nothing was found in the windpipe to obstruct respiration, in such of them as were examined after death.

Having stated the facts bearing on the question of vomiting, I may proceed to the theory of the subject, and, for an explanation, need not go further than Professor Lizars's own letter. At the concluding part, he says, "in the administration of chloroform, I have stated, that the constant production of retching, proves that the pneumogastric nerves are excited." Now, although retching occurs only occasionally, and never whilst the patient is deeply narcotised; yet, if it prove that the pneumogastric nerves are excited, it explains why the glottis, which is supplied by branches of these nerves, is not paralysed. The truth is, that the glottis is one of the organs of respiration, and retains more or less sensibility as long as the patient has sensibility enough to breathe. And so long as there are sensibility and energy sufficient to effect the complicated act of vomiting, the functions of the glottis appear to be unimpaired. When the narcotism from chloroform is confined within reasonable bounds, there is as little danger of blood getting into the windpipe, in operations involving the mouth, as of vomited matters in other cases. When the first fatal instance of inhalation of chloroform occurred in a girl near Newcastle, Dr. Simpson hastily asserted that she had been suffocated by some brandy given to her when dying, although but a teaspoonful was given which was swallowed, and ever since that time there has been a prejudice in Edinburgh against giving chloroform in large operations involving the mouth. Severe pain has, consequently, been inflicted in many such cases in that city; whilst in London probably nine-tenths of these operations have been performed under chloroform. If much blood flow into the throat there will always be some embarrassment to the respiration, whether a patient be insensible or not. The practice in such cases always was to lean the patient's head forward now and then, and, if this be still attended to the blood does as little harm under the proper influence of chloroform as without it. I cannot but think that Professor Lizars must have been mistaken in the case of tooth-drawing, in which he supposed that the blood trickled down the glottis. I have given chloroform in many cases, in which from eight to twelve teeth were removed at one operation; and, although subsequent vomiting, in some of the cases, revealed a good deal of blood which had been swallowed or flowed down the pharynx and œsophagus, there were never any symptoms of a drop having entered the windpipe or lungs. That the glottis is fully competent to take care of the air passages, and that suffocation is not very readily caused under the influence of chloroform, I have further ascertained by putting the heads of animals under water whilst insensible. These experiments will be given in detail on another occasion; but I may mention that a cat lay, in one instance, exactly two minutes with its head under the liquid, and readily recovered soon after being withdrawn.

It may be interesting to some of the readers of the *Medical Times*, if I enumerate some of the more important operations about the mouth in which I have administered chloroform. I may preface the account by mentioning an operation performed by the late Mr. Liston, in which ether was the agent employed, as showing that he was not afraid of narcotism in operations involving the mouth. The operation consisted in the removal of a very large tumour occupying the central part of the lower jaw, in a young lady. The bone was divided far back on each side.

Mr. Tatum removed a very large tumour of the lower jaw in a man in St. George's Hospital, dividing the bone at the symphysis, and disarticulating it on one side. Another tumour of the lower jaw was removed in St. George's Hospital, and one by Mr. Fergusson in King's College Hospital; also one in a gentleman, in private practice, by that surgeon. The superior maxillary bone was removed on two occasions, in St. George's Hospital, in which I gave chloroform, and also, on three occasions, by Mr. Fergusson, in King's College Hospital. In one of these cases the malar bone was removed as well. Mr. Fergusson also removed the superior maxillary bone in the case of a lady. In these, and similar operations on the face, the patients were first made insensible by means of the inhaler, and the insensibility was kept up during the operation by means of a sponge applied near the mouth from time to time; not more than about fifteen or twenty minims of chloroform being put on the sponge at once. Besides the prevention of the dreadful pain, the chloroform has the further advantage, in large operations on the face, of greatly diminishing the tendency to syncope from the unavoidable loss of blood. I have seen no ill effects from it in any case. One patient died soon after the operation, and I have explained the cause of death at some length in the *Medical Gazette* for February 9, 1849.

In the operations for nasal polypi, and for epulis, a good deal of blood generally flows backwards into the throat, but without any injurious consequences. In the operation for hare-lip, when the child is laid on its back, the blood also flows into the throat, if more than a few drops be lost, and is either all swallowed, or part of it is allowed to flow out by turning the child quickly round for a moment now and then. Mr. Fergusson operates with the child in this position, and I have administered chloroform in twelve of his operations for hare-lip within the last two years. Two of the children were but three weeks old, and two or three of the others were under three months.

Besides having the stomach empty, the other point to which Professor Lizars considers it necessary to pay attention, in order to avoid danger, "is the allowing the patient to breathe atmospheric air along with the chloroform." He adds, that "an experienced assistant is required to administer the chloroform, and to do nothing else. He must watch its effects, allowing fresh atmospheric air to enter the nostrils and mouth occasionally during its administration and influence, otherwise the blood may become too greatly carbonised, and death ensue." These remarks are, on the whole, judicious; but it is not easy to understand his exact meaning respecting the atmospheric air. If he considers that patients can inhale the vapour of chloroform unmixed with air, that is an error into which a great part of the speakers at the Académie de Médecine fell, in a discussion which took place last year. No human being has breathed unmixed vapour of chloroform, or ever will, as it can only exist in a separate state, at the ordinary pressure of the atmosphere, when raised to the temperature of 140°; or at the ordinary temperature, when the atmospheric pressure is reduced to about one-sixth the usual amount. The experiment of inhaling pure vapour of chloroform could only be tried on a small animal under the receiver of an air-pump. Professor Lizars, perhaps, means, however, that the mixture of vapour and air must be intermitted, and breathed by turns with air surcharged with vapour. This, however, is not at all requisite if the vapour be diluted to a sufficient point. If, for instance, the patient be breathing 95 or 96 per cent. of air, with 4 or 5 per cent. of vapour of chloroform, it will be unnecessary to intermit the process till insensibility be complete. It is not sufficiently understood, or, at least, borne in mind, that the vapour of chloroform requires to be largely diluted with air, not for the purposes of respiration, (its physical constitution ensures that,) but to prevent its operating with dangerous rapidity. In proof of this, it is only necessary to state the circumstance, that, in giving ether, only 70 or 80 per cent. of air is breathed with 20 or 30 per cent. of vapour; whilst, in the case of chloroform, there should be 95 or 96 per cent. of air; and, in the case of hydrocyanic acid, which I have administered in the Hospital for Consumption, there must be over 99 per cent. of air, with much less than 1 per cent. of vapour.

Professor Lizars recommends chloroform to be administered by putting two drachms or so upon a handkerchief.

This is the plan of Dr. Simpson. I have taken every proper opportunity, since the time when chloroform was first introduced, of opposing its use on a handkerchief in the way recommended; but I cannot hope that anything that I can write will receive one-tenth the circulation of the pamphlet issued by the Physician-Accoucheur to the Queen in Scotland, and copied into all the newspapers in the kingdom, when he first tried the effects of chloroform in an undiluted state, on the recommendation of Mr. Waldie, of Liverpool. The small amount of safety attending the use of the handkerchief may be judged of from Professor Lizars's estimate of that safety, notwithstanding his two points which he supposes to secure it. He admits that chloroform is a valuable agent in large operations, but others, attended with a not much less amount of pain, as the amputation of a finger or toe, he would have to be performed without it. Now others, as well as I, who have formed our opinion of it, from its use with a suitable inhaler, have no hesitation in recommending it in the smallest operations, being sure that with skill and care it is quite free from danger. I have twice taken chloroform to have a tooth drawn, and would not undergo a similar operation without it, so long as I could get a skilful person to administer it with a suitable apparatus.

Professor Lizars considers an instrument indispensable for giving chloroform to horses, but says, "in human surgery no inhaler or any instrument should ever be used; it is highly reprehensible—many lives must have been sacrificed to its employment." Now, an inhaler is not necessary for the horse any more than for man, except as a means of rendering the process more agreeable, manageable, certain, and safe; all which points it is our duty to consult in the human subject, as much as in the horse, although, perhaps, the former is the less deserving creature. Professor Lizars must have seen some very imperfect form of inhaler, perhaps with a tube to enter the mouth. He can hardly be aware that a former pupil of his own, who is now justly eminent, not less for his observations on ether and chloroform than on many other subjects—I allude to Dr. Francis Sibson—contrived an inhaler whilst at the Nottingham Infirmary, and disapproves of the handkerchief. With respect to the inhaler which I employ, it allows of such easy respiration that a person might wear it day and night for an indefinite period, uncharged with chloroform, and removing it to take his meals, without injury to his health. To prove that the handkerchief and not the use of inhalers has been the chief cause of the deaths from chloroform, it is only necessary to enumerate the fatal cases.

1. Jan. 28, 1848. Hannah Greener, aged 15, near Newcastle. Toe-nail operation. *Handkerchief.*

2. Feb. 23, 1848. Mrs. Simmons, of Cincinatti, U. S. Extraction of teeth. *Inhaler; no medical man present.*

3. A young woman at Hyderabad, in Hindostan. Distal phalanx of a finger. *Handkerchief.*

4. May, 1848. Madlle. Stock, aged 30, at Boulogne. Opening an abscess. *Handkerchief..*

5. Dec., 1848. Young gentleman at Govan, near Glasgow. Intended toe-nail operation. *Handkerchief.*

6. Jan. 24, 1849. J. Verrier, aged 17, Lyons. Intended amputation of finger. *Handkerchief.*

7. Feb. 20, 1849. Samuel Bennett, Westminster. Amputation of toe. *Handkerchief.*

8. Aug. 23, 1849. Mdme. Labrune, Langres, France. Intended extraction of tooth. *Handkerchief.*

9. Oct. 10, 1849. John Shorter, aged 48, St. Thomas's Hospital. Toe-nail operation. *Inhaler; given by a non-medical person.*

10. Nov., 1849. Girl Jones, Shrewsbury. Removal of eye-ball. *Not stated.*

11. Young lady, Berlin. Intended extraction of tooth. *Napkin.*

12. Feb., 1850. Artilleryman, Mauritius. Amputation of last phalanx of middle finger. *Handkerchief.*

13. Alex. Scott, aged 34, Guy's Hospital. Removal of portion of hand. *Handkerchief.*

These, I believe, comprise all the recorded cases in which death was clearly due to the administration of chloroform.

In one of the cases it is not stated that a handkerchief was used, though, from the context of the report, that seemed to be the case. Of the other twelve an inhaler was used in only two of the cases, and in neither of them was it used by a medical man, whilst, in the ten instances in which death was caused by chloroform on a handkerchief, it was administered by a qualified medical man in every instance but one. There have been four cases in which death was accidentally caused by chloroform taken by the deceased parties when no one else was present. Two of these deaths occurred in Scotland. A handkerchief was used in each instance, and, but for the practice of taking chloroform on a handkerchief, these persons would probably never have taken it at all. However, I have not included these cases in the above list. There was a death commonly attributed to chloroform which I have not included in the list,—that which occurred at Mr. Robinson's, the dentist; for I believe that that was a case of fatal syncope, due to mental emotion in a subject with fatty degeneration of the heart, and great enlargement of the liver. He was only just beginning to inhale, when he suddenly died. In that case an inhaler was employed.

Other supposed causes of the deaths from chloroform have been suggested by various writers, besides those above mentioned, only one of which I shall notice. Many persons, especially in Edinburgh, have attributed the fatal cases to the impurity of the chloroform employed; but, in the first place, it has been examined in nearly all the cases, and found to be quite good. And, again: although it might contain impurities which would cause irritation at the time, and subsequent disagreeable effects, it could not become contaminated with anything likely to cause sudden death; and, before this assertion is repeated, we ought to be told with what substance stronger than itself chloroform is liable to be contaminated. I fully admit the necessity of having chloroform, as well as other medicines, quite pure; as its adulteration, though not liable to cause death, may cause disappointment, and other disagreeable consequences; and it must also be admitted, that this, as well as other drugs, is liable to impurity, both in London and elsewhere. I am of opinion, however, that impure chloroform has not been supplied by the respectable houses of this metropolis. I generally use Mr. Morson's chloroform; but have, at one time or other, used that of Mr. Squire, Mr. Jacob Bell, Mr. Bullock, Mr. Hooper, Mr. Taylor, and others, and always found it good. I have also used the chloroform of Messrs. Duncan, Flockhart and Co., of Edinburgh, and cannot give it any better praise than by saying it was equally good. If the Edinburgh people wish to assert that they can produce something better than pure chloroform, they must call it by another name, for it must be a different medicine.

The real cause of the deaths from chloroform undoubtedly is, that in each case the patient has had an overdose; I mean more than was necessary to render the patient, or one of similar size and strength, insensible. By a dose of chloroform, however, must be understood, the quantity that is in the system at one time, and not the quantity inhaled during an operation. For instance, when the inhalation is left off for two or three minutes, a great part of the chloroform exhales by the breath, and the patient perhaps requires to inhale a little more. This should be considered a repetition, and not an increase of the dose.

The necessary points to be observed, in order to avoid the risk of giving an overdose, are, 1st, that its vapour be systematically diluted with a sufficient quantity of air, by means of a suitable apparatus — when no accident can happen, without the continued neglect of evident warning symptoms; and, 2nd, that the person exhibiting the chloroform should keep his whole attention directed to the patient, and be able to understand all the signs that occur. I have not space here to go fully into the description of the signs which indicate when the inhalation should cease, and an operation begin, but would refer to some papers of mine, "On Narcotism by Inhalation," in the *Medical Gazette*, 2nd vol. for 1848, and also to some papers on "Chloroform," by Dr. Sibson, in the same volume. I may state, however, that it is chiefly by attention to the state of the respiration and the eye, that danger is to be avoided. The pulse may be felt as a physiological inquiry, or with reference to the operation, but gives no guiding information concerning the chloroform, for the following reasons:—When the vapour is diluted to a safe extent, it might be continued till death, as I have ascertained in animals, and the pulse would still beat distinctly for many seconds after the respiration had ceased; and if, on the other hand, the vapour be of dangerous strength, the heart might suddenly cease to beat, and the first intimation of danger from the pulse would come only too late.

If chloroform be given on a handkerchief at all, not more

than from fifteen to twenty *minims* (a) should be put on at once. In this way it may be given in midwifery, as that quantity, and often much less, suffices for each application; but in surgery, where the full effect is required, this would be insufficient.

Frith-street, Soho-square, Aug. 27, 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

BY

HENRY SMITH, Esq., F.R.C.S.,
(Formerly House Surgeon to the Hospital.)
AND
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EXCISION OF THE KNEE-JOINT.

Great interest has been lately excited by a case of disease of the knee-joint, in which the operation of removing the articular surfaces of the bones has been performed by Mr. Fergusson. Unfortunately the result has been fatal; the patient has been carried off by one of those untoward accidents which will happen after operations of any severity, and the occurrence of which it is impossible to form any opinion upon before hand. Although this case must necessarily lose much of its interest in a surgical point of view, in consequence of the fatal result happening a few days after the operation, nevertheless, as we should have been too happy to have given the details of it at a future period, had success ensued, so in like manner we deem it a matter of duty to lay the case fully before the profession, and we doubt not that those who take a real interest in the practice and advancement of surgery, will look upon it as one not devoid of interest and instruction. Prior to relating the particulars, we will throw a glance at the history of the operation of excision of the knee-joint. We find authentic records of at least half a dozen cases which have been performed in this country; and they have all happened in the hands of men who have been an honour to, and have added greatly to the practice of their profession. Park, Crampton, and Syme, such are the men who have recommended and put in force this formidable operation. The celebrated Moreau (*père*), who stood equal in reputation with the above-mentioned names, performed it in France. Park, however, had the merit of first putting it in force. In 1782 he operated upon a sailor upwards of thirty years old, who had become crippled by knee-joint disease of ten years' standing. Park practised the operation on the dead body first, and ascertained that he could with facility expose and remove the articulating surfaces of the bones, without injury to the great vessels and nerves, by making a longitudinal incision in front of the joint, and another crossing it at right angles. Not long afterwards he removed the joint in the living body by the same incisions. After patient and anxious treatment of several months the man got well, and at the end of a year was perfectly able to walk about with a high-heeled boot, and without a stick. He afterwards went to sea, and made several voyages, in which, says Park, "he was enabled to go aloft with considerable agility, and to perform all the duties of a seaman." Unfortunately, at the expiration of eight years, this man was drowned. As to the opinion which Park arrived at from the result of this case, we cannot do better than quote his own words:—"On the whole, from what I have now seen of this man's limb, I do not hesitate to declare, that it appears to me so much more valuable than any artificial one, that were I in his situation, I should infinitely prefer the former, at the price at which he has obtained it."

The same surgeon performed the operation in another case the following year; but the patient unfortunately died after some months' suffering.

Moreau operated on a soldier in 1792, during the campaign with the Prussians. At the end of the third month "the consolidation of the bones was such that I left the limb at liberty in bed; the patient moved about at pleasure." Whilst he was thus doing so well, an unfortunate circumstance dashed to the ground the well-founded hopes of his surgeon. The patient succumbed under a dysentery which had prevailed amongst the soldiers; and, referring to the sad result, Moreau feelingly observed, "this unfortunate accident deprived me of the pleasure of enjoying the fruits of my care; but I remained convinced of the utility of the operation, and persuaded of the propriety and necessity of performing it in similar cases. I looked on my patient as cured, for I had no relapse to dread."

The next operation in this country was performed by the present distinguished Surgeon-General in Ireland, in the year 1827. The patient, a young woman aged 23, did not ultimately recover; but lingered on for upwards of three years, and then died of phthisis. The wound made in the operation never entirely healed up, and, on examination, the lower part of the femur was found to be in a necrosed condition.

His second operation he performed about the same period, and fortunately with perfect success, for we are told that three years afterwards "the femur and tibia were perfectly consolidated, and the thigh was not in the slightest degree wasted." The history of these cases, with some admirable remarks upon the operations of excision of joints, by Sir Phillip Crampton, will be found in "Dublin Hospital Reports," Vol. IV.

We find that Professor Syme was the next to perform excision of the knee-joint, and with Park and Crampton he has had two cases,—one successful the other not so. The first was done upon a little boy, aged 8, in the year 1829; it did well, and the patient was enabled to use his limb; but an unlooked-for circumstance happened to spoil the business, for as the child grew up the limb unfortunately did not increase; and we have it from an eye-witness of the patient several years afterwards, that "instead of being able to move freely about without the aid of a stick, the patient was obliged to support himself by a crutch whilst the limb hung useless, being shorter than the other by several inches, and so flexible at the cicatrix that it was totally unfit either for support or progression."

The next case was performed by Mr. Syme, in 1830. The patient, however, died in less than a month afterwards. Notwithstanding the well-known success both of Park's and Crampton's case, Mr. Syme, in a late work, has come to a somewhat hasty and arbitrary conclusion respecting the operation. He says: "The knee-joint may be excised, but not with the effect of preserving a limb so useful as an artificial substitute after amputation of the thigh." He seems to have formed this opinion upon his own cases alone, and to have forgotten the result in Park's patient, who was enabled to go aloft with considerable agility. Surely this was more than could be done by a sailor with a wooden leg, however well contrived.

Such, then, is the history of this operation, and such the precedents which were to form some sort of guide for the surgeon who contemplated a performance of a similar nature. The results of the several operations were certainly not very encouraging; nevertheless, they were sufficient to show, that the operation, in certain favourable instances, might safely and usefully supersede amputation of the whole of a limb. Mr. Fergusson has for several years thought of putting it in practice, should a fitting case present itself, which did not occur until within the last six weeks.

The patient, aged 21, a slightly made man, and in every respect healthy, with the exception of the joint disease, which commenced about three years since, the exciting cause being a fall on the knee. The usual signs of active disease at that time evinced themselves, and the patient was laid up for about nine months, and was treated in the ordinary manner, and with considerable benefit; but this did not remain long, for, two months afterwards, symptoms of acute disease again showed themselves: he was a second time relieved by treatment, but he relapsed about the commencement of the present year. He was sent up to the hospital in the present summer, for the purpose of undergoing amputation of the limb. The symptoms, when he was admitted, were by no means severe, but there was evidence of considerable disease. The joint was swollen, being two inches larger round than the one of the opposite side; the limb was slightly flexed at the knee, and it could not be moved from this position. The pain was not great when the patient was very quiet, but the least motion produced severe

(a) Drops of chloroform are widely different from minims, being extremely small.

suffering, which was chiefly felt on the inner side of the joint. The skin was perfectly healthy, although it was marked by several cicatrices, which testified to the existence of old sinuses, which had become healed. The general health was not severely affected. Such, then, being the nature of the case, Mr. Fergusson thought it hardly justifiable to remove the limb; but he considered it to be a fit case for attempting to save it, by the removal of the articulating surface of the joint, and, the choice of operation being submitted to the patient, he readily acquiesced, and the proceeding was determined on and executed by Mr. Fergusson, on Saturday, July 20, in the following manner:—

A vertical incision, about four inches long, was made on each side of the joint, the operator commencing just above the condyle of the femur, and carrying it as far as an inch or so below the heads of the tibia and fibula. These were connected by a cut carried transversely across the front of the joint. The flaps were dissected up and down; the ligamentum patellæ was divided, and with the bone turned up so as to expose the joint. What remained of the connexions between the bones was divided. The tissues were then very carefully separated from around the lower end of the femur, and the saw was applied just above the condyles; the section was quickly and effectually made. The knife was then carried carefully behind, and this portion was removed. The tissues were, in like manner, separated from the heads of the tibia and fibula, and these were removed. The patella was then taken away; several vessels that required ligature were tied; the wound was dressed, and the operation was concluded in a brief space of time. There was considerable disease of the joint. A considerable quantity of matter escaped, as the knife was being carried between the surfaces of the bones. The cartilages were ulcerated to a great extent.

On the next day after the operation, the patient was in a pretty favourable condition; there had been some oozing of blood; the limb was placed in a deal fracture-box, which opened laterally, and was furnished with a foot-board; there was little pain in the wound. The only unfavourable sign was a very rapid pulse. He was ordered beef-tea and milk, and water dressing was applied to the wound.

On the 23rd he was not so well; rigors had occurred, and he was feverish, and complained of pain in the head. There was no vomiting. The excessive rapidity of pulse (160) still remained, and excited uneasiness about the result.

25th.—Is very low; pulse 150, and feeble; countenance slightly sallow; there is marked rapidity of breathing; the tongue, however, remains clean and moist. There is hardly any action in the wound, and there is a sloughy appearance on it; to be washed out with myrrh lotion, and a poultice applied afterwards. The patient is to take some wine and chloric ether.

26th.—Has had shivering again; pulse 160; breathing rapid; no cough; no vomiting; tongue still moist. Continue with the same.

28th.—Seems better to-day than he has been; the pulse is not so rapid, and he has passed a good night; and the wound is looking more healthy, granulations are springing up on each side; but he has had some purging. To take decoct. hæmatoxyli ʒi. after each evacuation.

5 p.m.—Has had another rigor, which lasted ten minutes.

10½.—Low and faint; has had more evacuations; there has been some hæmorrhage from the wound, but cold water stopped it. To have some brandy. This patient passed a pretty good night; but the diarrhœa could not be stopped, although injections of logwood were tried; his pulse became very rapid again, and he died at 1 on the 29th.

Post-mortem Examination.—All the internal organs of the body presented a most healthy appearance. There was a patch of ecchymosis about the sigmoid flexure of the colon, probably the seat of the diarrhœa. There was no disease of the veins of the thigh or groin. On examining the wound, the lower end of the femur was found to be denuded of its periosteum for more than an inch, and on stripping this membrane up from the bone higher up, which was done with great facility, a large drop of pus was observed between it and the bone; this led to examination of the inner part of the bone, and it was discovered to be in a state of acute necrosis; pus was diffused throughout its cancellated structure, and through the medullary cavity to the extent of three inches. On examination the head of the tibia was found much in the same condition.

From the first day after the operation, although the patient appeared to be in as favourable a condition as could be expected after so severe a proceeding, one symptom alone caused uneasiness respecting the result, and this was the excessive rapidity of the pulse, which remained during most of the time he lasted. Great rapidity of pulse, especially if it continues, and if there are no other signs of general fever, must be looked upon as a very bad omen, it almost certainly indicates mischief of some kind; this was followed up by rigors, which recurred from time to time, and it was now plain that something serious was taking place, yet the tongue remained perfectly clean and moist. After death these striking symptoms were readily accounted for by the condition of the bones. Inflammation had attacked them soon after the operation, and rapidly produced suppuration and necrosis. The occurrence of this must be looked upon as very interesting, as it rarely takes place; it sometimes does happen after an amputation or excision, but we have never before observed this as a cause of death after an operation. Although this case has turned out unfortunately, it cannot be deemed conclusive against the operation, for it is highly probable that even had amputation been performed in the same situation, acute necrosis would still have taken place, for the same injury would have been done by the saw in amputation as in excision. H. S.

ST. GEORGE'S HOSPITAL.

By DR. BARCLAY,
Medical Registrar.

ACUTE RHEUMATISM—SUPPURATION—DELIRIUM TREMENS.

The supervention of active suppuration in and around the joints, upon an attack of acute rheumatism, although not a very rare event, is, nevertheless, fortunately not of frequent occurrence, as it is one of the most formidable results of that disease, and perhaps the least amenable to treatment. Several cases have within no long period terminated fatally at this hospital, with formations of pus within the articular cavities, but these have presented much less the ordinary characters of a rheumatic attack than that which I am now about to detail; and in some there seemed no doubt that the affection of the joints was secondary in its nature, and not improbably due to the absorption of pus, deposits of which were found in some of the central organs.

The delirium is designated as delirium tremens, because, though it be impossible to separate it from the rheumatic and the suppurative fever, yet its characters were especially those of the delirium a potu, and it occurred in a man of intemperate habits, corresponding exactly to the traumatic affection so frequently seen by the surgeon in persons of similar constitution. Acute rheumatism presents three forms of delirium, which it is not unimportant to discriminate in the treatment of each. In one the same inflammation which selects the fibrous structures round the joints and enveloping the heart, attacks those within the cranium; in another no alteration in structure is manifested, and the abnormal nutrition, or inappropriate stimulus of poisoned or deteriorated blood, alone can afford a solution of a symptom sometimes alarming in its severity, and even fatal in its issue; while, in the third, a predisposition is acquired by habits of intemperance, which receives a stimulus from the depressing influences of the disease, and may even own as its exciting cause the very same influences which develop the simpler form of delirium, but which still impresses upon it characters peculiarly its own, and demands a treatment which nothing but experience would warrant during the existence of such a disease as acute rheumatism.

William D—, aged 25, a gentleman's servant, was admitted into St. George's Hospital, under the care of Dr. Page, on 2nd August, 1850. It appeared from his own statement, which was afterwards confirmed by a fellow-servant, that he was taken ill on the night of the 27th ult., after having sat for some time in a draught to cool himself when over-heated by work, in spite of the remonstrances of his fellow-servants. He was seized with pain in the back and limbs, with severe rigors; and he has subsequently suffered from pains in all his joints, but especially in the right knee and wrist. He had never suffered previously from rheumatism; was a man of rather full habit, and admitted that he had lived freely; it was subsequently ascertained that he had been very intemperate in his habits. The tongue

was coated; bowels said to be confined; pulse 120, full but not hard.

The right knee-joint was a good deal swelled, was very painful, and tender to the touch, and there was a good deal of redness on the skin around it. The right wrist was also generally swelled, painful, and immovcable, patches of superficial redness existing in different parts of the skin around it. The other joints were all more or less affected. With the stethoscope no abnormal sound was heard. He was ordered to be bled to fourteen ounces, to have five grains of calomel and one grain of opium every six hours, and a senna draught to-morrow morning.

3rd.—Bowels freely opened. Blood presents a large clot with little serum, but is only slightly buffed, and not cupped. Pains somewhat easier; slept pretty well; perspires freely; tongue coated, but moist; knee more painful. To have poppy fomentations to the knee, and the bed-clothes supported by a cradle: to continue the medicine.

4th.—Pretty good night.

5th.—Has passed a restless night; knee and wrist still much swollen. One very marked and rather lurid patch of superficial redness exists over the ulno-carpal articulation; cutaneous redness spreads from knee; left elbow also painful to-day and beginning to swell. Heart still free from abnormal sound. To continue the treatment.

6th.—Slightly delirious last night.

7th.—Again more delirous last night. A red blush now extends along both sides of the thigh and leg, having exactly the appearance of inflamed lymphatics. The knee itself much less painful, as also the wrist; left elbow now much swollen; of a deep and lurid red. He is sweating profusely, and now rather excited in manner, and tremulous in his movements. Pulse frequent and soft; tongue rather cleaner; bowels open; urine high-coloured, clear, and free from albumen. To leave off the pill, and to have a saline draught, with five grains of Dover's powder every six hours; and a draught with fifteen minims of laudanum at night. To have an ounce of red wine in water occasionally, if he become low.

8th.—Last evening he became very violent, and has continued delirious ever since. He is sometimes very noisy, but he cannot exert much force. His movements are very tremulous, and have all the character of restless excitement peculiar to delirium tremens. Sweating profusely; the perspiration has no acid odour. Redness has very much abated over the joints. The swellings are soft and flaccid, as if suppuration had occurred. He seems to have no feeling of pain in them. Another collection of matter to-day is observed about the sterno-clavicular articulation on the right side. He is unable to give any account of his feelings, but is able to exercise a partial control over his mind when spoken to two or three times. Has had a good deal of wine, which he takes readily and says he likes. Opiates and stimulants were now given more freely, but in vain; he sank, and died at eleven the same evening. The heart's action to-day, when examined by the stethoscope, was of that peculiarly excited, abrupt character which I have often observed at the commencement of an attack of pericarditis before anything like friction-sound is established.

POST-MORTEM EXAMINATION 14½ HOURS AFTER DEATH.

Cranium.—Meningeal vessels loaded with blood. Slight serous effusion into sub-arachnoid cellular tissue. The cortical structure of the brain was congested, presenting in many parts a decided pink tinge. Puncta vasculosa numerous. Ventricles filled, but not distended, with clear serum.

Thorax.—Both lungs were loaded with serum, and congested at their lower and back parts. A small quantity of slightly turbid serum was found in the cavity of the pericardium, and a trace of plastic exudation on the surface of the left auricle. The heart itself was healthy, and there were no other morbid appearances.

Abdomen.—The abdominal viscera also presented nothing remarkable.

Articulations.—The structures entering into the formation of the right sterno-clavicular articulation were softened and surrounded by an accumulation of thick yellow pus, which infiltrated the cellular tissue at the upper part of the anterior mediastinum, and beneath the pectoralis minor formed an abscess of considerable size. Pus was also found in the cavity of the left elbow-joint; and in the right ulno-carpal articulation, infiltrating the cellular tissue between the tendons passing over the back part of the extremity of the ulna and along the inner side of the hand. In the latter situation, there was a good deal of sloughy cellular-tissue; the ligaments were softened, and the inner edge of the ulnar and cuneiform bones was exposed. No other joint was opened.

Dr. Page remarked, that if the issue of this case could have been foreseen, he should have felt hesitation in the abstraction of blood by venesection, although the appearance of the patient seemed to demand it. And if the intemperate habits of the man had been at first known, this circumstance would probably have been sufficient to contra-indicate depletion. Besides the supervention of delirium-tremens, the formation of pus implies a lower condition of plasticity in the exudation material than that which gives rise to the formation of organisable products; and the experience of all practitioners must accord in the extreme improbability of recovery when pus has formed in several joints. I am tempted to add to the foregoing a short abstract of a case bearing upon this point, which occurred under the same physician only a few months ago.

William C., aged 19, admitted under the care of Dr. Page, 25th Nov., 1849, with fever and delirium, and intense pain of right knee-joint. The redness of the knee was of a livid hue, and he had had severe rigors. He was confused in his answers; face much flushed; tongue coated, and inclined to be dry; pulse small and rapid; breathing hurried. The sounds of the heart, neither on his first admission, nor at any period during his illness, gave any indication of inflammatory action. He was treated with calomel and opium, senna occasionally, and leeches, in the first instance, to the knee. The first night or two he was delirious and restless, but he gradually became quieter; the pulse continuing rapid, sank in force; the tongue coated, but moist. He was ordered wine on the 27th; next day the right wrist was painful, swollen, and of a dusky red; and a line of superficial redness and tenderness followed the course of the vessels up the inside of the thigh; and, as there was decidedly more fever, the wine was again omitted. The swelling on the wrist took on the appearance of suppuration, and a collection of matter seemed to form on the back of the carpal and metacarpal bones, which, however, showed no tendency to make its way outwards. After remaining in an indolent state for some days, it disappeared, and meantime a deposit of matter had occurred to some extent on the back of the sacrum, where a large abscess formed, and discharged itself by two openings, one on either side of the coccyx, on the 6th of December. The calomel was continued till a certain effect was produced on the gums, and it was then slowly left off, and now his treatment consisted in a saline draught of the citrate of ammonia, with bark and laudanum every six hours, and a grain of opium every night. At this time he complained of a little cough, but it was impossible to examine his chest with any degree of accuracy in his enfeebled state, and nothing of consequence was made out. About the middle of December a slight degree of inflammation, with some swelling and puffiness, occurred on the back of the foot; but this, too, passed off without opening. On the whole, his aspect was healthier, his countenance less expressive of anxiety, tongue cleaner, pulse less frequent, and there was some hope of his constitution rallying. But, in addition to the constant drain on his system from the abscess over the sacrum, sloughs formed on his hips, notwithstanding the employment of the water-bed, which, coming away towards the end of December, left a tolerably healthy surface. He suffered from profuse perspirations, for which acids were ordered him, and nourishment was afforded in every shape in which he could bear it. After a time his strength began more decidedly to fail; his appetite fell off; his pulse became rapid and feeble; his tongue red and raw-looking; the discharge from the back was abundant, and became very offensive, and he sank exhausted on the 25th of January.

POST-MORTEM EXAMINATION 26 HOURS AFTER DEATH.

The integuments over the hips and sacrum were destroyed, and the bones exposed; body much emaciated.

Thorax.—Few old adhesions on right side; several ounces of serum, slightly tinged with blood, found in both pleuræ, but most on left side. A small abscess, about the size of a hazel-nut, was found in anterior thin edge of lower lobe of right lung, and four others of about the same size existed immediately beneath the pleura of left lung, two near the apex, and two in lower lobe; both lungs collapsed but crepitant; three ounces of clear serum in pericardium; heart healthy.

Abdomen.—Liver healthy; spleen large, soft, mottled; kidneys large, smooth, and mottled; right slightly congested; left contained a small abscess of the size of a pea towards its lower part, filled with light-coloured pus; capsule easily detached.

Right Lower Extremity.—Three small sinuses, one above, one below, on the outer side of the knee, and one above the inner condyle, led into the cavity of a large abscess at the back of the thigh. The bone was denuded of periosteum, and in a state of necrosis; cancellous structure softened and infiltrated with pus. The cartilage over inner condyle and patella was extensively absorbed. No communication whatever existed between the cavity of the joint, and the abscess formed at its outer and back part.

The remarkable fact of the abscess having formed in great measure external to the joint, points to the conclusion, that this too was a case of rheumatic, and not of simple or scrofulous inflammation. There was no history of injury to the joint, and the symptoms had commenced, so far as could be ascertained, like one of acute rheumatism.

ROYAL FREE HOSPITAL.

IMPERFECTLY-UNITED FRACTURE, ULTIMATELY REQUIRING AMPUTATION.

By JOHN L. MILTON, Esq., M.R.C.S. Lond.

The records of the last few weeks in this hospital have offered some interesting cases of maltreated, or, to speak more charitably, of unsuccessfully-treated fracture; of these we shall select two, although it may be necessary to advert to others as illustrative of points of treatment or pathology: and here, in modifying the word maltreated, we do it simply in the firm belief that the want of success is, in most cases, owing to the patient being unmanageable, or to the injudicious interference of friends. In all cases where blame seems necessarily to attach itself to one of the two parties, we are disposed to side with the medical attendant rather than with the patient; with the former a successful result must be the guiding star of his line of treatment. Inclination to do good, and, where this is not present, personal interest demands it,—and hence he bends every energy towards obtaining a rapid and complete cure. With the patient it is, in many cases, merely a determination not to sacrifice some favourite whim, restlessness, despondency, or an unreasonable demand on the skill of his surgeon to counteract at once the bad effects of the fracture, and the indisposition on the part of the patient to aid his efforts. Such a view as we have here advocated is forced upon every surgeon even at the very beginning of his career. Were the accounts given by the patients alone to be believed, one might really fancy that many men were dissatisfied with the improved state of modern art, and could only find a stay by reverting to the barber-surgery of a bygone age.

One of these patients exhibits an instance of one of the most formidable fractures with which the surgeon ever has to grapple, viz., fracture of the upper part of the thigh, the two portions uniting at an angle, and demanding for its cure resection of the bones at the lapse of a year. As this man is now under treatment we shall postpone the case to a period which will admit of the result being included in the narrative; the history of the other is as follows:—

The patient, a man of ordinary strength and bulk, is an engine-man by trade. Nine years ago, at the time of his accident, he was in the employment of Mr. Dixon, of Rough-hills, near Wolverhampton, his department being to attend to the cleaning of a large engine at the pit-mouth. On the Easter Tuesday morning he went to work very early, and somewhat intoxicated, having indulged freely overnight in the revelry common to that time. While standing on the bearing boards, which are placed by the side of the beam, in order to oil the gear, he lost his balance, and fell into the engine-gear. His left leg getting fastened in it, he was unable to extricate himself, and hung there at the mercy of the engine, every movement of which carried him up and down, his head all the while beating against the floor, so that, to use his graphic expression, "he has not been right *thear* since." At last, the engine stopped for want of steam, and he fell out of the gear, when, finding his leg broken, he crawled behind the cylinder, as the safest place; here he remained for some time, it being still very early in the morning, until some of the wagoners came, who, seeing the state he was in, had him sent home in a cart.

On reaching home, a surgeon was sent for, who found so much swelling that he could not set the leg for twenty-four hours after. The limb must certainly have been in a fearful state. It was shattered, rather than broken, about two inches above the ankle; the upper part of the tibia was driven violently through a wound 2½ inches long. About 1½ inch of the inferior portion of the fractured bone was comminuted, or, as the patient was told, "ground to powder," and he says that the foot was twisted round so that the toes had nearly taken up the usual place of the heel, and the skin around the wound was very much frayed by the friction of the gear. Yet there seems to have been very little hæmorrhage; the arteries, it is true, may have been lacerated in such way as to account for this, as it seems difficult to suppose they could have entirely escaped under such violence; and, to conclude, he was suffering intense pain. This was not a very agreeable case to have in hand; and, to complicate the matter still further, he had no one to nurse him but his father, an old pensioner, who was intoxicated from morning to night during the whole time his son was laid up.

The surgeon now came and set the fracture, but, owing most probably to the extent of the injury, the leg remained considerably shorter than the other; the means adopted, however, do not seem to have been very efficient, for the patient tells us it was simply put up between two splints made of "ould tub chines,"—*Anglicè*, staves,—which do not even seem to have been valuable on account of the skill which had been expended on making them, for the surgeon threw them into the fire when he finally took them off; but it would be asking too much that a surgeon should provide all these expensive mechanical appliances out of his own pocket, for it could not be one moment hoped for, that the patient would ever be in a condition to pay him, and it is needless to say, that there is no one else to whom he could look for payment, (however ready every one might be to blame him for neglecting the patient,) parish and masters agreeing in repudiating all claims of this kind. When we look at the dilemma in which a surgeon is thus placed, we can only wonder that cases such as we are relating are so rare. No pads were used, and the patient was left without a nurse or a friend near him. When the surgeon came again he removed the splints, and found a very great deal of pus forming in one place, which he opened, and relieved the poor fellow from the agony he had been suffering day and night. He likewise found that the leg was an inch and a half shorter than the other, and proposed to the patient to have the ends of the bones sawn off, so that the fracture might be properly reduced. To this the patient would not consent, on the plea that he had already suffered so much, as, indeed, he had during fifteen days of the time; the leg was then put up again in the old splints. In this way he went on, and, at the end of about three weeks, unable to lie any longer in bed, he got crutches, and emancipated himself from the surgeon's control, for he not only made his way to another room, but even out into the lane near the house. To this, in fact, he attributes his recovery, as he now soon regained his health and strength; but the leg remaining painful, and quite useless, he applied to a surgeon for advice, who told him to put it into the spring every morning, which he did with great relief to the pain; but he remained a cripple, and was in consequence obliged to enter the union. He now resolved upon having it off, having learned that this was the only thing likely to do him any real good. The parish surgeon, and others, endeavoured to dissuade him from taking such a step; but his mind being made up, he came to London, and entered the Royal Free Hospital, under the care of Mr. Gay.

On examining the limb, the man was really found to be, as he stated, a cripple. A badly united fracture was soon made out, the leg being twisted and shortened at least an inch and a half, and the foot everted and awry, so that the patient never could rest steadily on it. In bringing the foot down he always placed the inside line of it first of all on the ground, and, if he attempted to set it down flat, was unable to stand steadily. The operation was accordingly resolved upon, and, on the 11th of July, Mr. Gay amputated the leg at the middle, there being, in his opinion, serious objections, particularly in regard to labouring persons, to amputating lower down, the principal of which is the much greater difficulty in adapting the stick-leg to a long stump in such a way that the patient shall be able to use it in all his movements without feeling it to be a serious encumbrance.

Nor is this objection in any way visionary; Mr. Fergusson, instrument maker of Smithfield, stated in reply to some questions on this head,—

1. That, unless the stick leg, the "pin," be fixed to the calf of the leg, it is excessively difficult to adapt it; the surface on which a very great and unequal pressure is made by the weight of the body being otherwise too small and uneven.

2. That the distance from the stump to the thigh, where the belts are fixed on by which the leg is kept up, is too great, and admits of too much play when the leg is cut low down.

3. That he finds where there is a low stump, and the tibia has not been bevelled down after amputation, ulcerations occurs from pressure of the stick leg on the anterior part of the stump in a very short time, and that this is prevented by forming a good pad of muscle with the calf, and shaving off the edge of the tibia.

On examining the bones after maceration and section, it was found that a large portion of the shaft of the tibia had been lost. The fracture, as now looked at, seemed to begin about two inches above the ankle, and go obliquely from before backwards and upwards, for two inches and a half through the tibia; posteriorily and superiorly these two portions were united directly to each other; anteriorly, however, they were united by a wedge-like portion of bone; but they did not even then approximate correctly to one another, so that the tibia was twisted on its own axis, the lower part having never been rightly replaced. No fracture of the fibula, nor any rupture of its ligaments, could be detected, so that it is somewhat difficult to account for the patient's story of the foot being so twisted round that the toes were opposite to the posterior surface of the leg before the fracture was reduced.

The case is now so rapidly advancing towards a cure, that it will, in all probability, not be necessary to advert to it again. The man sleeps well, eats well, and expresses himself pleased that the leg is off, and that his sufferings are over; the line of division has healed up, with the exception of a minute space in the centre, and he moves about perfectly well by the aid of crutches.

We have most particularly to request that all communications for the editorial department of this Journal be simply addressed

"To the Editor of the Medical Times,
46, Princes-street, Soho;"

and more particularly at this season, when "London is out of town." If this regulation be not attended to, it is probable that important papers may come to hand too late for insertion.

THE MEDICAL TIMES.

SATURDAY, AUGUST 31.

THE *MEDICAL GAZETTE* AND DR. LETHEBY.

We must confess to no little astonishment at the uncalled-for and elaborate attack which the *Medical Gazette* has made upon Mr. Letheby. It is hardly necessary for us to remark, that Mr. Letheby's reputation as a toxicologist is almost unequalled. The course of lectures now publishing in our columns, would alone be sufficient to place him among the most learned, dexterous, and, at the same time, cautious and prudent observers, who could be called upon to apply the delicate tests of chemistry in the detection of crime, and to express, in a court of justice, the opinions which are to guide the decision both of judge and jury. On the other hand, the opinions of the *Medical Gazette* on matters of medical jurisprudence are, for certain reasons, entitled to the utmost respect; and any statement appearing in its columns on this subject, carries with it the weight which attaches to the name of its distinguished Editor. It has been, therefore, with no little care that we have gone over the evidence in the case of Ann Merritt, and it is with no little pain that we are compelled to charge our Contemporary with a most unnecessary exhibition of severity and ill-temper.

The whole point in dispute is simply this. In a case of poisoning, Mr. Letheby detected a certain amount of arsenic in the stomach, in the intestines, and in the liver. The circumstantial evidence which went to show that the poison had been wilfully administered, and that the administratrix was the wife of the deceased, determined the jury to return a verdict of guilty. An opinion of Mr. Letheby's tended to strengthen this decision, inasmuch as he contended that the poison had been probably given at a certain time; and the other evidence proved that, if given at this time, this must have been the act of the condemned person. On this point hinges the whole of the long and bitter article which appears in the *Gazette*. The *Gazette* asserts, that Mr. Letheby was not justified in this opinion; Mr. Letheby contends that he is able to prove the accuracy of his statements. For our part we may leave the point to be argued between the two toxicologists. We need only say, that Mr. Letheby's evidence answered the ends of justice; that the fact of poisoning was detected by him, and that the poisoner received the commuted punishment of the law.

But we do not see why the *Medical Gazette*, because it differs on a point of such extreme difficulty and obscurity from Mr. Letheby, should attempt to disparage this gentleman even to the extent of looking out his qualification in the *Directory*, and of recording the fact that he is only a Bachelor of Medicine of the University of London of seven years' standing; as if Mr. Letheby were not as well known to the profession as any lecturer on toxicology anywhere, or as if the M.B. of the London University were not as honourable a distinction as any title which can be gained by medical practitioners in these kingdoms. Why should our Contemporary have devoted ten pages of his moderate space to such a question? Mr. Letheby's evidence required only that the *Gazette* should, if it deemed proper, express its dissent therefrom, and there was not the least occasion why an ungenerous personal attack should be made upon an able and useful labourer in the same field as that in which our Contemporary is so honourably known. If, as we believe, this attack is misplaced and unnecessary,—if everything could have been gained by a moderate and reasonable exposition of the reasons of dissent,—if the disputed scientific point could have been separated from all considerations respecting the youth, standing, and qualifications of its holder,—then we are convinced that our Contemporary has not adopted the course which is incumbent on an independent and impartial journal. For not only is the evidence of medical men, in courts of law, damaged by such unnecessary criticism, but the ends of justice are themselves thwarted, by the doubts which a clever advocate can found upon what he deems to be the uncertainty of science, and the discrepancies of opinion among scientific men.

THE COLLEGE OF SURGEONS AND THE TRUST REPOSED IN THEM.

The letter of the Council of the Royal College of Surgeons to Sir George Grey, dated April 23, 1850, published in the *Medical Times* of May 4, elicited a most sensible reply from the Home Secretary; and that reply obliged the Council again to address Sir George Grey. The importance of these letters demands their publication; we have,

therefore, this week, laid them before our readers *in extenso*. The two points in the documents of especial importance are,—1st. The unwillingness expressed by Sir George Grey to make any alteration in the constitution of the College, while the fellows who directly or indirectly practise pharmacy, or those who reside at a greater distance than five miles from St. Martin's-le-Grand, are excluded from the Council; and 2nd. The explicit avowal, by the Council of the College, that it is not the "practising pharmacy" which really constitutes, in their opinion, a disqualification to a seat among their body, but a supposed want of acquaintance with the science of surgery in the great mass of those who practise pharmacy; and that the pharmacy test, accordingly, is only applied, because the Council are *unable* "to draw any line which shall include those practising pharmacy, whose *professional qualifications entitle* them to seats in the Council, and which shall exclude those practising the same who have no pretensions on the score of superior skill and knowledge in surgery." At last, then, Sir George Grey has been brought to see the unfairness of excluding provincial surgeons from seats on the Council, and the Council themselves have acknowledged the injustice inflicted on a large number,—"not a few" are the words of the Council—of their brethren by the pharmacy test. We say, have acknowledged; for, to confess that men distinguished by qualifications which peculiarly fit them for seats in the Council, are, by the application of the pharmacy test, excluded even from becoming candidates, is to acknowledge its injustice. These are two points gained in the great contest. For Sir George Grey's advance in knowledge, the profession are mainly indebted to the Council of the National Institute; the gain on this point is one not likely to be lost. From Sir George's letter of June 12th we augur the happiest *ultimate* results. The confession of the Council of the College of their real motives for excluding those who practise pharmacy from the Council, removing, as it does, all quibbles about pures and impures, is also, indeed, a gain to the cause of the General Practitioner. The midwifery test was some time since abandoned by the Council; the pharmacy test is now declared to be retained only because the Council are unable to frame a law *less unjust*, which shall exclude from the high places of the College those who are unfitted to advance its interests. Henceforth the Council must maintain the right of the College to its charter, on the grounds of expediency; they have confessed, in plain terms, in unequivocal language, its injustice.

But all this has only to do with the political government of the profession. Sir George Grey has yet to advance to that higher position from which he may regard the subject of medical reform; he has yet to look at the question with a view to secure the public good. Let us endeavour to aid him by referring to one point touched on in the letter of the College, when speaking on the injustice of the pharmacy test.

The Council acknowledge that practitioners connected with mining or manufacturing establishments(a) are frequently called on to perform important surgical operations, and that these practitioners require to be as intimately skilled in the pactice and science of surgery as those attached to metropolitan hospitals. The Council know that a very large majority of the men referred to are members only of the College; that no other surgical qualification is required for Union Surgeons; that all these Practitioners are in the habit of performing, and must often necessarily perform, the capital operations of surgery; and not only must perform, but determine on the propriety of performing those operations; that the highest surgical knowledge, as well as the greatest surgical skill, is often demanded of them. Yet the Council, who know this, while claiming the sole right to be entrusted with the care of the surgical education of the profession, maintain that the best means of advancing the interests of the science of surgery, and of serving the public good, is to require from the members of the College, *i.e.*, among others, from the surgeons of Unions, "of mining, and of manufacturing establishments," only such an amount of surgical knowledge and skill as shall show that they, namely, men hereafter to operate for stone, amputate limbs, and tie important arteries, are fitted only for the "ordinary exigencies of surgical ministrations." The "needs and safety of the public," forsooth, in the opinion of the Council of the Royal College of Surgeons, *require* that the great body of the profession—that Union surgeons, that surgeons to mining and manufacturing establishments—men called on to perform, in any given time, a larger number of serious operations—we speak deliberately, and from certain knowledge of both classes of men—than, in the same time, are three-fourths of the members of the Council of the College of Surgeons;—the "*needs* and *safety* of the public"—we thank the College for the words—require, that these operating surgeons shall, by education, "be calculated *only* for the ordinary exigencies of surgical ministrations;"—again we thank the College for the words.

Can Secretary Sir George Grey hesitate, after this, whether he shall "disregard" the Charter of 1843, to which the Council, in their letter to the Home Secretary, not in the most respectful manner, appeal? Can he hesitate, after this, in which schedule of the Medical Reform Bill to place the College of Surgeons? We fancy Secretary Lord John Russell found no difficulty in determining, in "auld langsyne," in which schedule of *the* Reform Bill he should place Old Sarum? It could no longer perform, for the good of the community, the trust reposed in it, and Schedule A was its tomb. The Council of the College of Surgeons cannot, or, what is equivalent, will not provide the public with an efficient body of surgical attendants; they weekly let loose on society men whom they declare are unfitted to discharge the duties the Council know, in virtue of possession of their diploma, they may be called on to perform. The members of the Council declare they are unwilling or incapable of doing better; then surely the time is past for a Home Secretary to temporise or correspond; the time has arrived for him to do that which his position demands of him for the public weal, *i. e.*, to remove from the College the trust they are unable or unwilling to discharge, and to confide it to the hands of those whose *interests* and ability shall afford a guarantee that their duties will be discharged so as to supply "the needs" and ensure "the safety" of that body for the good of which alone legislation on the subject is demanded—the public. The certainty of cash rewards, the attendants on the display of extraordinary skill or profound surgical knowledge, will secure for the wealthy all they can require; but legislation alone can provide daily efficient surgical attendants for the poor and needy. A wise and paternal Government will take care of those who are unable to assist themselves.

(a) We were once on a visit for a few weeks at the house of a General Practitioner in a small manufacturing town. During that time he reduced one dislocation of the thigh, and one dislocation of the elbow-joint. He amputated the second and third phalanges and their metacarpal bones, one thigh, and one arm. He removed a breast affected with scirrhus, and operated for strangulated hernia.

ROYAL COLLEGE OF SURGEONS.

CORRESPONDENCE OF THE SECRETARY OF STATE AND THE COLLEGE.

Whitehall, June 12, 1850.

Sir,—I am directed by Secretary Sir George Grey to acquaint you that your letter of the 26th April, and the communication which accompanied it, addressed to him on behalf of the Council of the Royal College of Surgeons in England, and the resolution agreed to by them, have received careful consideration; and it appears to him desirable that the attention of the council should be drawn to the following points, viz.:—

The resolutions propose to exclude from the council every fellow of the college who has directly or indirectly practised pharmacy; and further, every fellow who resides at a greater distance than five miles, by highway or road, from the General Post Office at St. Martin's-le-Grand.

It appears that these two conditions will necessarily exclude from the council all fellows resident or practising in the provinces, and even if the disqualification with respect to distance were to be removed, many fellows of extensive practice as surgeons and general practitioners, who practise, and are under the necessity of practising pharmacy, would still be excluded. Sir George Grey has reason to believe that the refusal to admit into the council any fellow whatever to whom it can be objected that he practises, or has within five years practised pharmacy, would create much dissatisfaction.

Sir George Grey is anxious to receive some further explanation of the views held by the council upon the subject of the alliance and union of the two London colleges with the university, referred to in the conclusion of your letter of the 23rd April. This matter is the more important, inasmuch as in several interviews which Sir George Grey had with deputations upon this subject, great solicitude has been expressed to understand distinctly what the council had in view in this respect.

There is also another point of no less consequence on which the resolutions of the council are silent, viz., while the council proposes certain alterations of the charter of the Royal College of Surgeons, with reference to members of the college, they do not state any clear proposition with regard to that class of medical practitioners, not members of the college, who have been termed general practitioners, and whose incorporation as a separate body forms one part of a scheme that has been strongly pressed.

As the council contemplate the organisation of the whole profession, it would be desirable to know in what relative position it is intended that these gentlemen now practising as general practitioners are to remain, and also what the college has in view with respect to gentlemen who may propose to practise in future under the same license and conditions.

In any proposition for the regulation of the profession, it is necessary to have in view the interests of this important class, as regards its existing and its future members. It has been asked, indeed, and the question deserves attention, whether the council propose that there should be any such class in future. If it be intended that there should be no such class hereafter, but that all members of the medical profession are to be connected with one or the other of the colleges, it is only the more necessary to ascertain what will be the position of the existing general practitioners. The importance of this subject is not diminished by the consideration that the College of Physicians appear to have adopted generally the views of the College of Surgeons.

Sir George Grey requests that you will submit this letter to the council, and he will be ready to receive, and consider any further observations which they may wish to bring before him.

I am, &c.,

(Signed) H. Waddington.

Joseph Henry Green, Esq.,
President of the Royal College of Surgeons.

Royal College of Surgeons of England, July 22, 1850.

Sir,—I am directed by the Council of the Royal College of Surgeons of England to acknowledge your communication of the 12th ult.

The council, in compliance with the desire of Secretary Sir George Grey, have carefully reconsidered the points to which he has drawn their attention.

To the first statement in your letter, viz., "The resolutions propose to exclude from the council every fellow of the college who has, directly or indirectly, practised pharmacy; and further, every fellow who resides at a greater distance than five miles, by highway or road, from the General Post-office at St. Martin's-le-Grand." The council beg leave respectfully to object, that the disqualifications in question do not belong to their recent resolutions, but are provisions of the charter now in force. The council, in framing the resolutions which they have had the honour of submitting to Secretary Sir George Grey, did not, indeed, propose to abolish these disqualifications; but, with the sincere desire of removing all legitimate causes of discontent, they are of opinion, that the concessions already made in the proposed changes in the constitution of the college, are as large and liberal as are compatible with the maintenance of any college which may merit the name of a College of Surgeons. They cannot, therefore, but lament that Secretary Sir George Grey "has reason to believe that the refusal to admit into the council any fellow whatever to whom it can be objected that he practises, or has, within five years, practised pharmacy, would create much dissatisfaction;" but they may be permitted to observe, that they would have been more capable of furnishing a satisfactory answer to the complaints which have reached Secretary Sir George Grey had they had the advantage of knowing upon what reasonable grounds those who practise pharmacy claim a right of eligibility to the council; and at the same time they cannot but think that it properly devolves on the claimants to establish any right which they may assert in opposition to the provisions of a Royal charter, or at least to show that the concession of any such claim would be productive of benefit to the profession or to the community.

The council cannot suppose that Secretary Sir George Grey is disposed to disregard the charter granted by Her Majesty in 1843 to the College of Surgeons; and they beg to remind him that it was the result of the earnest study of the council, and of Her Majesty's Government of that period, to effect all the reforms calculated to render the college an efficient institution for the promotion of the art and science of surgery. Yet, in this, as well as in all the preceding charters, the principle of the ineligibility to seats in the council of those who practise pharmacy has been uniformly adopted; and it cannot be doubted that the conversion of the College of Surgeons into an institute of general practitioners, or, as they have heretofore been styled, surgeon apothecaries, would be as fatal to the character of the college as it would be contrary to the intention with which it was incorporated.

The council can hardly think it necessary to point out that the professional class evidently contemplated in the several charters as comprising those peculiarly qualified for the office of member of council, consists of surgeons of hospitals, teachers of anatomy and surgery, those who have distinguished themselves by original observations and discoveries in surgery and the collateral branches of science, eminent practitioners, including those who hold honorary appointments, and, in general, all those whose aid is anxiously sought in dangerous accidents, in delicate operations, and in serious surgical complaints; but, considering that Secretary Sir George Grey apprehends that the exclusion of those who practise pharmacy "would create much dissatisfaction," the council feel themselves bound to state, as their deliberate conviction, that those who have established the proof of their especial and successful devotion to the study and practice of surgery, are those best fitted to act collectively for the advancement of surgical science, and, therefore, best qualified to be entrusted in a collegiate capacity with the functions of superintending the education and of conducting the public business of the surgical profession. On the other hand, the council believe that the claims of surgeon-apothecaries, or general practitioners, to seats in the council, may be best appreciated by the fact, that they are almost universally engaged in medical practice, and have few opportunities to practise surgery, and fewer inducements to cultivate it as a science. The exceptions to the rule are the surgeons in the provinces who are attached to hospitals, who are connected with mining or manufacturing establishments, the operations of which are productive of manifold injuries requiring surgical aid, or who have obtained a deserved reputation, as the consulting and operating surgeons of the districts in which they reside. To these, and they are not a few, the council, bearing a cordial testimony to their high professional character, would most willingly, notwithstanding they "practise, and are under the necessity of practising pharmacy," extend the right of eligibility to the council; but they confess their inability to draw any line which shall include those practising pharmacy, whose professional qualifications may entitle them to seats in the council, and which shall exclude those practising the same, who have no such pretensions on the score of superior skill and knowledge in surgery. The council have, therefore, arrived at the conclusion, in accordance with the provisions of the charter of their college, that it is indispensable to the maintenance of sound chirurgical knowledge, and no less to the interests of the profession and of the public, that the government of the college should never be entrusted to those who, practising pharmacy, have been immemorially designated as apothecaries.

In reconsidering the provision of the present charter, which excludes from the council "every fellow of the college who resides at a greater distance than five miles, by highway or road, from the General Post-office at St. Martin's-le-Grand," the council see no reason to recommend any alteration therein. They are of opinion that fellows "actually practising their profession" could not perform the duties which devolve upon them as members of council, should their residence be at a greater distance from the metropolis; and they beg to remind Secretary Sir George Grey, that a seat in the council is not a mere honorary distinction, or that it requires only regular attendance at stated meetings of the council, but that a large amount of the business of the college is necessarily transacted in committees, and that the meetings both of the council and of committees are often the result of unexpected calls. The meetings of council during the past year have been no less than twenty-two; and the meetings of committees, during the same period, have amounted to thirty-four. From this statement it will be evident, that the exclusion, which, it is presumed, will cause dissatisfaction, arises simply from the fact, that fellows of the college, residing at a distance from London, cannot perform the duties which devolve upon them as members of council; and it is quite clear that there is no assignable reason for excusing them from the duties which they would be bound to fulfil.

The council remark, that Secretary Sir George Grey "is anxious to receive some further explanation of the views held by the council upon the subject of the alliance and union of the two London Colleges with the universities;" and they trust that the solicitude stated to be expressed by the deputations, in their interviews with Secretary Sir George Grey, is favourable to a design which the council believe to be fraught with advantages to the profession. They beg to be permitted to hold themselves excused from pledging themselves to any specific plan, since its definitive arrangement obviously requires the consent and agreement of other parties; but they would most gladly avail themselves of the sanction of Her Majesty's Government to open, conjointly with the College of Physicians, a negotiation with the universities, and especially with the University of London, as most interested in the proposed measure.

The council, further, are desired to express their views "with regard to that class of medical practitioners, not members of the college, who have been termed general practitioners, and whose incorporation, as a body, has been strongly pressed."

The council feel some difficulty in furnishing a suitable and satisfactory statement in reply to this request. The meaning which they attach, and which they presume would be legally attached, to the term "General Practitioner," is the designation of one who has obtained the diploma of the College of Surgeons, either as member or fellow, and the license of the Society of Apothecaries, and who, in conformity therewith, practises as surgeon, apothecary, and accoucheur; such general practitioners constitute the larger part of the class who, possessing the qualification, medical and surgical, required by the Poor-law Commissioners, are appointed as medical officers of poor-law unions. Such are the general practitioners whom the National Institute professes to represent, and of whom they urge the incorporation as a college of general Practitioners.

Other than these the council know of no practitioners who can be designated with any degree of propriety "general practitioners."

There are, indeed, some, and the council believe they are not numerous, who, practising as apothecaries and accouchers, are merely licentiates of the Society of Apothecaries, and are not members of the College of Surgeons; but who can scarcely, or only by a lax use of words, be considered to have any title to the character of general practitioners. The council are ignorant of any claim on the part of such licentiates to be separately incorporated, or that their incorporation forms a part of any "scheme that has been strongly pressed."

The plan contemplated by the representatives of the general practitioners, in connexion with the institution of a College of General Practitioners, and assented to by the representatives of the College of Surgeons, at the conferences held at the College of Physicians, had for its express object that, after the passing of the proposed Bill, all general practitioners should be required to have been admitted both to the College of Surgeons and to the College of General Practitioners, and to be registered accordingly. The council of the college believe that the necessity of a double qualification, medical and surgical, in the case of general practitioners, has been uniformly admitted, whatever differences of opinion may exist with regard to medical corporations and their power to license. In accordance with this view, they have recommended in their late communication with Secretary Sir George Grey, that the general practitioner should obtain his license to practise medicine, surgery, and midwifery, by passing suitable examinations at the College of Physicians and College of Surgeons; and they venture to add that, in the organisation of the whole profession, it would be inexpedient and inconsistent with the prevailing social arrangements to recognise or to incorporate as general practitioners those medical practitioners who have no surgical qualification.

Finally the council, after a deliberate review of the propositions which they had the honour of submitting to Secretary Sir George Grey in their letter dated April 23, can discover no reason for changing the opinions which they then expressed, or for making any further alterations in the constitution of the college than those proposed in the above communication; and they trust that their proceedings will be at no distant period accepted by those of their members who call themselves general practitioners as the result of a sincere desire for maintaining the efficiency and dignity of the profession of surgery.—I have, &c.

(Signed) EDMUND BELFOUR, Secretary.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Zoist; a Journal of Cerebral Physiology and Mesmerism, and their Applications to Human Welfare. This is the Truth though opposed to the Philosophy of Ages. (Woodcut.) "Instruct the Ignorant." July, 1850. No. XXX. Vol. VIII. Published Quarterly. London: Baillière.

We have given the title of the *Zoist* exactly as it appears on the wrapper of the July Number,—a title remarkable for its unparalleled presumption and unblushing effrontery. Under the mask of "cerebral physiology" we have here the old atheistic doctrine, that the mind is not a self-existent, independent principle, but a mere result of some mystic action or function of the brain, surreptitiously imposed upon us. We have next the assumption, that not only is mesmerism true, but capable of "applications to human welfare," ingeniously insinuated; then follows the trumpet-tongued quotation, "This is the truth, though opposed to the philosophy of ages;" and subjoined to this persiflage appears that very famous woodcut before described by us, representing Dr. Elliotson seated between the two Okeys, in the character of a bearded sage, poring over the book of fate, the inspired damsels on either side resting their fair heads upon his shoulders. The group is very happily conceived; and not less significant is the inscription on the pedestal of the design, "Instruct the ignorant." We have looked over many curious old books on astrology, magic, witchcraft, and oneiromancy—which latter superstition being that branch of Egyptian and Babylonian magic which dealt with the interpretation of dreams, sleep, and stupor, was nearly allied to mesmerism. We have, also, with equal curiosity, looked over other tracts upon demonology, sorcery, necromancy, alchemy, metoposcopy, chiromancy, &c., the titles of all of which are not only amusing from the quaint boldness with which they announce the certain truthfulness of their several predictions, visions, revelations, and interpretations, but from the frontispieces, figures, diagrams, and hieroglyphical signs, prefiguring the mysteries which are to be unveiled; yet, amidst all these relics of now moth-eaten superstitions, we doubt if any one of them has a physiognomy more paradoxical and significant of the art of conjuring than that of the *Zoist;* and we do hope the curators of the British Museum will, at all events, preserve one of these wrappers, as a literary curiosity for the antiquary of some future age.

So much for the title. Now for the contents of the July number of this pseudo-scientific journal. And here we certainly confess ourselves to be in some difficulty; for, while the assumed facts, the false reasonings, the illogical deductions, and, above all, the pernicious tendency of the mesmeric doctrines, challenge exposure and demand the severest castigation, the ridiculous anecdotes, the comic stories, the droll illustrations, which are ever and anon obtruded upon our attention, disturb our gravity, and disarm all expostulation, with a set of men who appear to be as profoundly bewildered as the philosophers in the flying island of Laputa! Still we must not permit the sense of the ludicrous to dazzle our judgment, and carry us away from a more serious consideration of the subject; for the principles propounded by the *Zoist*, as we have premised, are calculated to undermine the foundation of all philosophy and religion, and cut asunder the ties that

bind together the very frame-work of society. The ultimate tendency of the doctrines of "Cerebral Physiology," as propounded by the *Zoist*, Dr. Elliotson himself has openly enough avowed; in his "Human Physiology" (*vide note*, *page* 365) he formally enunciates this opinion,—we quote his own words,—"that we possess no such imaginary thing as an immaterial soul." In the *Zoist*, 1844, he has the presumption to declare that those who do not believe in mesmerism may as well "take their eyes out with their own hands, and throw them in the face of the Almighty;" and, continuing in the same strain, he argues that "man did not make himself," and therefore is not a responsible being. So much for mesmerism, *alias* zoism. We marvel that any clergyman of the Church of England should have the temerity to enlist under so infidel a banner; yet in the July Number of the *Zoist* we find the opening article professedly written by the Rev. George Sandby, Vicar of Flixton, Suffolk, in which he has walked out of the legitimate paths of his duty to report, not the faith he has in the spirit of his own sacred ministry, but his unbounded belief in the heterodoxy of mesmerism; which he illustrates by a case of insanity cured, as he is weak enough to allege, by the mystic agency of mesmerism. So little does this reverend gentleman seem to know of the ordinary rules of evidence, that he was not at the pains to take those precautions which every sensible man would have done to prevent being deceived. It is not necessary, he tells us, to publish the name of the lady, nor to state in what part of England she resides. "I shall admit," he confesses, "at once, that I have never seen the patient referred to, and I know no more of the facts hereafter described than what I have learned by letter."—(*Zoist*, p. 111.) Hereupon, under this anonymous cloud, he lays before us a series of letters, containing details so extravagantly absurd, that we wonder they could for a moment have been palmed upon the credulity of the most simple person. He appears to have been so far imposed upon as to believe that the will of a female mesmeriser could at pleasure control, and compose even to sleep, a lunatic in a state of raging mania. The patient, he informs us, was under treatment in the house of the impostor sibyl, who herself relates the manner in which she wrought her charm in the following terms:—"It was not till after she came to this house, and, owing to a severe attack of jaundice and the absence of all opiate, she became so fearfully excited that suicide seemed impending, that I truly and heartily desired that she should sleep, and then sleep came, or at least a deep stillness that bore its semblance, though at first her frantic movements were so rapid that I could scarcely follow them as she flung herself from side to side in the bed."—*Zoist*, p. 119.

If the Rev. George Sandby would condescend to follow the precept of the *Zoist*, and instruct himself, he will find abundant evidence in the early history of witchcraft of young women who could simulate convulsions, fits, insensibility, clairvoyance, and all the modern phenomena of mesmerism, but who were, nevertheless, proved to be sheer impostors. The learned vicar has only to extend his erudition, and look into the works of Reginald Scott, George More, Increase Mather, Joseph Glanvil, and a pile of pamphlets concerning Martha Brossier, Richard Dugdale, Mary Tofts, Anne Moore, and the Lancashire witches, and he will find that our modern Merlin, Dr. Elliotson, followed by his credulous troop of mesmerising magicians, have only retraced their steps into the very "thick and film" of the darkness of the middle ages. The Rev. George Sandby, who is evidently ignorant even of the literature of the subject, concludes his "valuable communication," by stating that the case of this anonymous girl, "interesting as it appears, is by no means an isolated one, and that the records of mesmerism can furnish many other instances in which insanity has been cured and kept in abeyance by its means."—(*Ibid*, p. 124.) Unluckily, the rev. gentleman forgets that he has not given us a tittle of evidence to prove that the girl in the above case was insane; and so far from it being true that insanity has been cured by mesmerism, we believe that not one single well established case to that effect is upon record. Nay, more; if he will have the goodness to consult the "American Journal of Insanity," (Vol. IV., p. 200), he will there find a case of insanity produced by mesmerism, upon the authority of Dr. Earle, of the Bloomingdale Asylum; nor do we wonder that a brain cracked enough to believe in such a remedy should eventually succumb under its influence. We do not understand, however, why the philosophical vicar of Flixton should be so irate with Dr. Conolly, because he expresses his disbelief in mesmerism. He tells us, "many must have seen him (Dr. Conolly) in the army as a recruiting-officer about England;" for our own part, we never met the Doctor with an epaulette on his shoulder, or stripes upon his arm, and, judging from the earnestness with which he has advocated the abolition of every kind of restraint in cases of insanity—even mania,—we should think he must have had, all his life, an intuitive horror of the discipline and restraint prescribed by the articles of war in the British army.

The next article entitled, "Illustrations of the Silent Power of the Will and Sympathy of Brains, by Mr. Henry Stafford Thompson." It begins, "My dear Elliotson." When two such magnetic poles as the heads of Dr. Elliotson and Mr. Thompson come together, or, to speak more learnedly, are brought *en rapport*, it may be expected that the silent induction of the mesmeric fluid between them will be very prodigious; and that, when the wires of cerebral sympathy are brought into near approximation, there will be no inconsiderable evolution of light and probably heat. This is exactly what has here happened; but it is only fair to state, that the light would appear to hover like a glory around the head of Dr. Elliotson, while it flits here and there like an aurora borealis round the pole of Mr. Thompson, which may be accounted for, perhaps, by his living further north, his letter being dated from Fairfield, near York. Be this as it may, Mr. Thompson is a very clever man — an electro-voltaic prodigy — a marvellous specimen of a powerful human magnet; but, at the same time, we must say, owing to some laxity perhaps in his copper coils, he must be rather simple-minded, otherwise he would not, with so much *naïveté*, have given currency to the following theory:—"I think," says he, "that there is a sympathetic *relation* existing between individuals entirely independent of intention on one side, or expectation on the other." Of course there is. The "sympathetic relation" produced by mesmerism between individuals independent of intention has considerably augmented the population in many of the rural districts of Germany, wherefore some of the German States have very properly prohibited the practice of this demoralising art. This was an untoward admission; but then it is to be considered that Kircher, Alpinus, Colomb, Cavallo, Brugmann, and other scientific men, have clearly proved that the softer the substance, even of iron or steel, the better conductor does it become of the magnetic fluid; and we have no doubt that the softer the brain really is, the more favourable must be its condition for the accumulation and transmission of the mesmeric influence. Hence the brain of Mr. Thompson obviously appears in a fit condition to become a very remarkable magnet; he has only to exercise the silent power of his will, and, by a very singular attraction, he draws people after him by the skirts of their coats, or the hem of their petticoats, sometimes even backwards, just as the oxen were thievishly enough drawn by their tails into the cave of Cacus. But here the operator shall speak for himself. The following is his own description, — we neither add nor suppress a word: "I was at a theatre with a party, and noticed one of the ladies putting her hand frequently to her head, as if she were suffering from headache. I observed to her that I feared she had a headache. She said, 'Yes; and the noise and heat have made it so much worse that I think I shall be obliged to leave.' I was sitting immediately behind her. I said nothing, but fixed my attention upon her head, and in ten minutes she said, 'It is very curious, but since you spoke to me the pain has left my forehead; and I have a sensation as if my head were drawn backwards to you.' "—(*Zoist*, p. 131.) Now, supposing that, instead of concentrating his volition upon the lady's head, he had done so upon any other part of the lady's person or dress, or about the fabulous regions of the bustle, it is to be presumed that he could, had he so willed, have drawn the spinal axis most incontinently off the centre of gravity, and the lady would probably have fallen, at an angle of 45 degrees, into his arms. But even this is not all. The powers of mesmeric traction are still more beautifully exemplified in the following account:—"One of the most exquisitively sensitive and interesting subjects I have ever met with," says Mr. Henry Stafford Thompson, "was a young lady suffering from an affection of the eyes, brought on by brain fever. I was consulted about her case. At our first interview,

without an attempt to mesmerise, or an idea of mesmerism on her part, I willed her to get up, come across the room, and sit upon a sofa near me. I then, by will, put her to sleep, and when in that state every question I proposed to her mentally she answered aloud, sometimes saying, 'Why do you ask me that?' On one occasion I willed her to come to a house where I was calling. I was not able to remain to see the result, but she nevertheless went, and her mother informed me afterwards, that she told her she must go and call at that house, for she knew that I was there and wanted her. On another occasion, having seen her in a crowded ball-room without being observed by her, I willed her to come to me. I concealed myself and avoided her in the crowd. I saw her walking about and looking anxiously in every direction. When she saw me she exclaimed, 'Oh, I knew you were here; if I had not found you soon I think I should have gone to sleep or fallen down; I felt something draw me so strongly in the direction I found you.'"—(*Zoist*, p. 131.) The lady, then, confessedly felt something draw her towards the person of Mr. Henry Stafford Thompson—Platonism is out of the question—she being, it is pretended, ignorant of his presence. Now, it is obvious that there was either a collusion between these parties or that the aforesaid Mr. Henry Stafford Thompson is a very improper person to be at large. An old woman who pretends to draw a fatted calf after her through a grass meadow, or to give a magic charm to innocent herbs, or to witch a child out of the measles or small-pox, is unceremoniously dragged by the parish beadle before a justice of peace and under the Vagrant Act sent to the treadmill. What difference is there between the moral delinquency of the half-witted and uneducated old beldame, and these half-witted philosophers? We confess we perceive none, excepting that the self-impregnating, will-subduing mesmeric battery is a more formidable engine for assailing female virtue than the incantations of a score of old women.

The mesmeric cases reported by Mr. Capern, Mr. Mott, Mr. Parker, and Mr. Tubbs,—gentlemen whose euphonious names are at present, professionally, "to fortune and to fame unknown,"—may be summarily dismissed. They remind us only of the significant couplet in the poem of Dr. Syntax, where the bookseller, shaking his head at the manuscript of the poor traveller, reminds him—

> "We can get tours—don't make wry faces—
> From those who never saw the places."

Which may be thus travestied:—

> "We can get *facts*—don't make wry faces—
> From those who never saw the *cases!*"

There never yet was any system of quackery,—including homœopathy, allopathy, hydropathy,—nor even any solitary quack medicine,—from the elixir vitæ of Paracelsus down to the balm of Gilead of Solomon,—that could not command a host of cases in support of its infallibility. We attach no credit to this description of abortive evidence. In the article entitled "Medical Dishonesty" *versus* "Clerical Credulity," the Rev. George Sandby again mounts the platform, and, giving way to a very unchristian condition of temper, he accuses us of misrepresenting his opinions; and consoles himself that either we did not read his review of "The Celestial Telegraph," and were, "therefore, guilty of a most dishonest action," or that we did read it, and, in that case, were "guilty of wilful misrepresentation." We confess that we did read the article in question, and think the present defence set up by the reverend gentleman rather aggravates his defence than otherwise; for here, in defiance of the second Levitical commandment, he sets up Emanuel Swedenborg as another god of his idolatry, declaring him to be "the great founder of modern psychology." What shall we hear next? The quiet village of Flixton must be strangely perplexed by the illumination of such a vicar! It would be well if the bishop were to look after the orthodoxy of this part of his diocese! But to proceed.

We are next furnished with an article, communicated by Dr. Elliotson, giving a glowing account of the progress of mesmerism in India, where a Dr. Eisdale would appear to be a wonderful manipulator. He has, among other miracles, succeeded in taking no less an exalted personage by the nose than the Minister of Nipal, a Calcutta Baboo, whose conversion to mesmerism is one of the most important events in India for the year 1850. We quote the account *verbatim*, lest we should be accused of jesting, "A bottle, containing carbonate of ammonia, was handed to the minister and his suite, who all made violent contortions on applying it to their noses. The baboo's nose was mesmerised and his eyes blindfolded, and the minister was requested to apply the bottle to his nose. That there might be no mistake, he seized the patient by the lips, and held them closed, so that he could only breathe through the nose. He continued to breathe with perfect ease, however, saying that he smelt nothing; but the moment his nose was *demesmerised*, he felt as much disgust as any of the party;" *Anglicè*—the Calcutta baboo sneezed!—(*Zoist*, p. 193.) This mesmeric experiment is retailed with becoming gravity by Dr. Elliotson, and may remind some of our readers of an anecdote related by Aubrey of Charles II. touching for the king's evil. There was a man, old Aubrey tells us, named Arise Evans, "who had a fungous nose, and who said it had been revealed to him that the King's hand would cure him; wherefore, at the first coming of King Charles II. in St. James's Park, he kissed the King's hand, and then rubbed his nose with it, which disturbed the King, but cured him." There is something, adds Mr. Weld, who quotes this incident in his recent History of the Royal Society, "exceedingly ludicrous in this story;" but, we may truly affirm, it is not half so ridiculous as a tithe of the stories dispersed through the pages of the *Zoist*.

But we exceed our limits. In conclusion, the present Number of the *Zoist* advertises the following ominous "Notice to Correspondents." "Dr. Todd, with certain others, will receive, in our October Number, what they richly deserve." Heigho! the wind and the rain. We recommend Dr. Todd to provide himself instantly with a lightning conductor, or to devise some prophylactic measure to ward off this Olympian thunderbolt. For our part, we smile at threats which are the mere ejaculations of toothless malignity. We have accused the *Zoist* of disseminating, under the mask of mesmerism, principles which are unphilosophical, materialistic, and pernicious; we have affirmed that its doctrines have practically a demoralising tendency, which would, if tolerated, undermine the well-being of society; and in support of these charges we have before us the most clear and irrefragable evidence. We shall not, therefore, allow this heresy still to be propagated under the pretext of its having any pretension even to the name of a science. *Judex damnatur cum nocens absolvitur;* we shall bruise the head of the serpent, and leave it to trail its wounded length, hissing but harmless, along its tortuous paths for the remainder of its days.

The Commercial Hand-Book of Chemical Analysis. By A. Normandy. Pp. 640. London. 1850.

Ever since the days of Accum's "Death in the Pot," the public have felt no inconsiderable degree of interest in the ways and means which science places in the power of all to detect adulterations and sophistications generally, as well as quantitatively, and to determine their exact amount. It is needless to observe that all sophistication is, to say the least, unjust; but it extends further—it may lead to injurious consequences, and even to fatal results. This is not the proper place to inquire into the cause of the widely extended range of sophistication throughout the British realm; suffice it to say, that while we carry the palm of being the first mercantile nation in the world, the almost universally prevailing practice of adulteration is a sad stain on our escutcheon. Our author ascribes no small effect to the vulgar practice of bargain-hunting, and illustrates his meaning by a familiar example:—

"It is well known that, at the present moment, the average cost price of coffee, including duty and roasting, is one shilling and two-pence per pound, and yet we see it marked for sale, in a great number of shops, at *one shilling*. What a bargain! But how does this come about? Simply thus:—

	s.	d.
½ lb. coffee, at 1s. 2d. per lb. .	0	7
½ lb. chicory, at 4d. per lb. . .	0	2
The grocer's profit . . .	0	3
1 lb. of adulterated coffee . .	1	0

The purchaser has, therefore, paid one shilling for sevenpenny-worth of coffee. What a bargain! not to speak of the wretched beverage the infusion yields."—Preface, p. 5.

The object of the book is to indicate the various falsifications, or the impurities which *naturally, accidentally,* or, *intentionally,* may contaminate the various articles met

with in commerce, and to enable the manufacturer, the miner, the trader, and the public generally, to detect the nature and amount of these sophistications and impurities, or, in other words, *to ascertain the real or intrinsic value of such articles.*

The work is very ably executed, and reflects great credit on the untiring industry and talent of the author. The publishers, at this critical period, when every ounce of *matériel* is examined by the searching eye of the economist, as to its true value, have done the public no mean service by bringing this work before them. One of the greatest checks, indeed, against sophistication and adulteration—whether it be as regards guano, coffee, tea, bread, brandy, butter, brimstone, pearl-ash, Peruvian bark, morphia, or vinegar, or any other of the multitudinous list of articles comprehended in the index of this work—is the acknowledged fact, that the precise analysis of the chemists is now competent to detect at once the imposition and determine its amount. The reader will be surprised to find that there are no less than fourteen different articles with which our daily bread is sophisticated, to wit:—

Alum, subcarbonate of magnesia, sulphate of copper, sulphate of zinc, subcarbonate of ammonia, carbonate of potash, bicarbonate of potash, chalk, plaster, lime, clay, starch, water, pulp of potatoes.

We recommend this book to the careful perusal of every one, and we would most willingly have made large extracts from it; but the work is of such a truly practical nature, that we have no doubt it will become speedily popular. It may be truly affirmed to be of universal interest, and we strongly recommend it to our readers as a guide alike indispensable to the housewife as to the pharmaceutical practitioner.

FOREIGN CORRESPONDENCE.

ROME.

HOSPITALS AND PUBLIC ASSISTANCE AT ROME.

For many centuries Rome has been little better than an immense congregation of vagabonds and beggars. It were out of place to examine here the causes of this untoward condition, to which all writers on the eternal city invariably allude. With a population of 154,000 souls, Rome contains no less than 40,000 paupers; the number of individuals devoted to the church exceeds 6000; and, if to these we add an immense number of idlers, living on contributions extracted from the state or the public, we find that about one-third of the inhabitants are, in every sense of the word, indigent, depending on the labour of others for their daily bread. Public assistance, therefore, is organised on a grand scale at Rome; but its benefits are sadly diminished by want of zeal, attention, and knowledge, on the part of the administration. The Emperor, whose active mind embraced the condition and wants of every people connected with his power, endeavoured to remedy the growing evils of Roman mendicity. By his order, the Count de Tournon had the pauper lists revised; and of 30,000 indigents returned by the parochial clergy, 15,000 were struck off. Two large poor-houses, exactly similar to those of England at the present day, were opened for the men and women (400 males, 500 females), and every effort was made to revive the elements of national industry—the only true remedy for pauperism. On the evacuation of Italy by the French, things soon fell into their former state of neglect; and since the late troubles the evil has increased tenfold. It must be confessed, however, that the Pontifical Government does all that its feeble resources permit to palliate the unhappy condition of its subjects. The sum annually expended by the *Camera Apostolica* in public assistance, amounts to 364,284 Roman scudi, or nearly 40,000*l.* Of this sum, 25,000*l.* are devoted to the hospitals, which have, in addition, a revenue of about 26,000*l.* per annum from various sources. Besides this, other charitable institutions expend different sums, amounting, with the above, to a total of 128,000*l.* per annum, from which 22,000 paupers obtain a scanty subsistence.

The benevolent institutions of Rome present many curious peculiarities, some of which are worthy of passing notice. The *sussidio de' pubblici labori*—a species of national workshops—expends 52,000 crowns on 1000 workmen, who literally do nothing the whole year round. Another institution, of very ancient date, supplies funds to poor persons cited before the tribunals, for the purpose of aiding them in their defence.

The "forty blind and halt"—a corporation of forty sturdy beggars—enjoy the lucrative privilege of begging at the church doors. The daily harvest of each is calculated at about one shilling, no mean sum in Rome.

The houses of refuge are numerous. First, we have three "*retiri per le donne penitenti,*"—penitent magdalens, whose fault has been committed; and two asylums for virtue in danger,—"*pia casa di carita per le fanciulle pericolanti.*" Even the widows are not forgotten in this work of charity and morality. Several small asylums are open for young widows, whom poverty or evil propensities might tempt to stray from the right path. A noble society, patronised by all that is good and great at Rome, supports the 600 children rendered orphans by the cholera.

But I must allude to the institutions more nearly connected with medicine. One of the oldest and most active establishments at Rome is the "*Archiconfraternità della Morte,*" a corporation which has imposed on itself the strange duty of seeking, within a circle of thirty miles, the bodies of all persons assassinated or cut off by violent and sudden deaths. These bodies they take possession of, and recite masses for the benefit of the souls once contained therein. The corporation has collected 180 bodies within the last ten years. As to the skeletons of the defunct, they are arranged artistically, in various parts of the church, forming garlands, crosses, mitres, and every kind of fantastic ornament, exactly like arms in an artillery museum. Nothing is more curious or grotesque than this frivolous and misplaced decoration.

The hospital of the Holy Trinity is one of the oldest at Rome, dating from the commencement of the 14th century. It receives the numerous pilgrims who crowd to Rome at certain seasons, and also the convalescent patients from other hospitals. In the year 1625, it is said that no less than 582,768 pilgrims received hospitality in this vast asylum. The space set apart for "the convalescents" is much more restricted; the number of patients seldom exceeding 100; though, in time of pressure, many more are accommodated.

The "Deaf and Dumb Hospital" is of modern creation. It was founded in 1830, and contains twenty inmates; but twenty others are educated in St. Mary's Hospital.

The "Foundling Hospital" of Rome is more ancient even than that of Paris, having been built in 1198. It seems strange that the capital of the Christian world should be overrun with bastards; but such is the fact, whatever the cause may be; and from the great attention paid to the inmates, it would seem that they derive from no ordinary parentage. The hospital is composed of three large wards, containing fifty beds each for the foundlings, and an immense number of apartments for the nurses, &c. About 3,200 foundlings are received every year, and the mortality amounts to 27 per cent. At the age of twelve to fourteen the boys are disposed of without much difficulty; but the young girls are a great source of trouble to the administration. Unless reclaimed by their parents, which rarely occurs, or provided with a place, they are consigned to an establishment called the "Bastard's Asylum," and there pass the rest of their lives, useless to society, and a burthen to the State. The foundling girls fortunate enough to obtain husbands receive a little dowry of 25*l.*; but they rarely have this luck. Formerly, they were marched through the public streets thrice a year, escorted by the choir of the hospital, and thus a few husbands were obtained; but the custom fell into disuse. In addition to the grand hospital, the Pontifical States contain thirty-three other foundling hospitals, and it is calculated that the number of infants annually abandoned is as one for every 841 inhabitants. The legitimate children, also, are provided for in the most complete manner. Five hospitals or asylums receive 919 boys, and no less than seventeen, containing 1294, are set apart for the female children of the poor. Indeed, no less than 5500 individuals are supported at the expense of the state, in the various institutions of this kind, with which Rome abounds.

The French papers mention the death of M. Raffeneau Delille, a celebrated botanist, who accompanied Bonaparte as a *savant* in his expedition to Egypt. Neither date, place, nor cause of death is mentioned.

GENERAL CORRESPONDENCE.

METEOROLOGY—ITS INFLUENCE ON VACCINATION.

[To the Editor of the Medical Times.]

Sir,—Mr. Lafargue, in a late number of the *Medical Times*, has stated that he has "lately seen some cases remarkable for the irregular and unusual influence of vaccine lymph;" in two cases the pustules not arriving at maturity till the *tenth*, and in two other cases till the *eleventh* day. So far as my own experience has gone, this occurrence is by no means so rare as your correspondent would seem to infer, and has been noticed, if I mistake not, in most of the monographs on cow-pox. But, Mr. Editor, I would not probably have troubled you on the present occasion, but for the purpose of directing attention to what has been lately matter of notoriety in this, and, as I am credibly informed, in the surrounding districts, including, besides Kinross-shire, the populous counties of Fife and Perth, that, during the last two months of June and July, any attempt to produce the usual effects of vaccination has, in nineteen cases out of twenty, proved entirely unavailing. During the period above-mentioned, the weather, with trifling exceptions, may be characterised as sultry and warm. And so far in corroboration of the account given by your correspondent, I may mention, that in the very few cases where vaccination succeeded, in more than one case very considerable (I may say, even *unusual*) deviations took place from the usual course. In one, in particular, where the matter appeared to lie dormant till towards the end of the fifth day, the change was very remarkable, and by the end of the *eighth* had completely assumed the appearance of vaccination on the tenth day; the tumefaction, bright red appearance, and hardness, characterising vaccination, continuing *unabated for two days*.

On Sabbath, 3rd August, the sultry weather was succeeded by heavy rains and a sensible change in the atmosphere. On Monday, the 4th, having previously expressed something more than a hope that the change would very probably lead to greater success in attempts at vaccination, I set about making up my arrears. Nor was I disappointed. No failure whatever took place, and this in cases where the attempt had been previously unsuccessful for the fifth, sixth, and, in one case, for the seventh time; the whole of the cases now, at the end of the eighth day, presenting the regular appearances after vaccination.

Probably some of your readers, better versed in meteorology than I can pretend to be, will endeavour to throw light on this matter, which is certainly deserving of being investigated; and I think it by no means improbable, that by others of your readers similar observations to Mr. Lafargue's and my own have been made during the period referred to.—I am, Sir, &c. Robert Annan, Surgeon.

Kinross, August 12, 1850.

STERILITY.

[To the Editor of the Medical Times.]

Sir,—I am anxious to ascertain, from your numerous correspondents, their experience respecting a cause of sterility of more frequent occurrence than is usually supposed. This cause arises from a malformation in the male organs, and proceeds from the orifice of the urethra being placed below the glands, and generally occupying the situation of the frænum. This malformation is not unfrequent; I have, in my own practice, repeatedly met with it, and had two instances of it only last year. I believe that there can be little doubt of its being a cause of sterility, as I am acquainted with two individuals who have this malformation. They have been married for some years, and there have been, as far as I can learn, no symptoms of conception, and their wives appear to be perfectly healthy.

I have observed, that the locality of the orifice varies, being in some cases more dependent than others. It will be, therefore, necessary to bear this circumstance in mind before arriving at any conclusion as to the propagating powers in these cases. In the two instances I have mentioned the malformation was at the frænum.—I am, &c.,

London, Aug. 21, 1850. M.D.

TREATMENT OF LIPOMA.

[To the Editor of the Medical Times.]

Sir,—In the Foreign Correspondence in the *Medical Times*, August 10th, is a plan proposed by M. Legrand for the cure of lipoma by the application of caustic round the root of the tumour. The same treatment has been adopted by myself for nine or ten years, and with no less success than had attended M. Legrand's practice. Since about 1846 I have in many cases used, instead of caustic potass, strong sulphuric acid applied cautiously to the top of the tumour, (taking care that it does not run on the surrounding parts,) and repeating it every second or third day until the whole is removed. The latter plan is very preferable, as it destroys but about one-half as much integument as the former one, and consequently leaves a much smaller cicatrix.

Will you do me the favour to insert the above in your journal?—I am, Sir, &c.,

C. A. Dalby.

Ashby-de-la-Zouch, August 26, 1850.

CURE OF CATARACT BY ABSORPTION.

[To the Editor of the Medical Times.]

Sir,—With reference to your marginal note at page 211, I may observe, that I have now, for nearly thirty years, been occasionally operating for the removal of cataracts, and have, during the whole of that period, uniformly preferred the operation of keratonyxis, as recommended and so successfully practised, by Mr. Saunders, about forty years ago, for the absorption of cataract. I have operated upon people of almost every age, from childhood up to three-score years and ten, and on cataracts of all degrees of consistence, without, in a single instance, having failed to cause their absorption in a longer or shorter space of time; and, with few exceptions, the patients have ultimately obtained as good vision as usually follows either couching or extraction. The only objection to the operation for absorption, so far as I am aware, is, that in cases of cataract of firm consistence, especially in elderly persons, it generally requires to be repeated once, and sometimes even twice, before the pupil can be entirely cleared. This, however, I deem of little importance when the simplicity of the operation, the readiness with which any person of ordinary dexterity may perform it, and the almost certain success which attends it, are taken into consideration.

As an instance of the kind of vision which sometimes follows the operation for absorption of cataract, I shall give you the following incident:—In 1822 I operated upon the left-eye of a boy, from the neighbourhood of Lockerby, aged twelve, who had been blind, in both eyes, about seven years. The cataract was soft, and good vision in that eye was soon restored. A few years afterwards the same operation was performed on the other eye with equal success; and, when upwards of twenty years of age, he enlisted into the 42nd regiment, (the mark of the cataract needle, I presume, was not visible at the time); served with the regiment at Gibraltar, and afterwards in Ireland, where he gained a medal by excelling his comrades in shooting at the target. He ultimately fell a victim to fever in Ireland.—I am, Sir, &c.,

Archd. Blacklock, late Surgeon R.N.

Dumfries, Aug. 24.

THE MEDICO-ETHICAL ASSOCIATION AND THE POOR-LAW BOARD.

DUTIES AND SALARIES OF MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

Sir,—We are instructed by the Council of the Manchester Medico-Ethical Association, to request that you will publish the accompanying Memorial to the Poor-law Board, in the columns of your journal.—We are, Sir, &c.,

J. Aikenhead,
W. C. Williamson, } Hon. Secs.

Manchester, August 24, 1850.

"To the honourable the poor-law board.

"The Council of the Manchester Medico-Ethical Association beg respectfully to request the attention of your Honourable Board to a resolution recently come to by the

Manchester Board of Guardians, involving certain medical regulations of an objectionable character.

"It is proposed, that a very widely scattered district, containing at least 50,000 inhabitants, shall be assigned to one medical officer, whose remuneration shall be 150*l.* per annum; out of which all medical and surgical appliances shall be supplied; he being, at the same time, debarred from private practice; and, further, that no extra fees shall be allowed for midwifery cases, or for surgical operations, except 1s. 6d. for each successful case of vaccination, which latter, the Council have been informed, will probably not realise more than 50*l.* yearly. There is reason for assuming that an annual average of more than 2000 cases of sickness will have to come under the treatment of the medical officer.

"Under such circumstances the Council submit that the salary proposed will not defray the necessary outlay in medicines and leeches; and, as no other source of income will be available, (private practice being prohibited,) the conclusion is certain that the pauper patients will sustain the wrong.

"The Council would further submit, that the physical capabilities of one man, whose means will neither enable him to employ a dispenser of medicines, to use a conveyance, nor to engage the occasional services of an authorised substitute, will be utterly unequal to the conscientious discharge of the duties imposed on him.

"For the foregoing reasons, amongst others that might be advanced, the Council of the Manchester Medico-Ethical Association most respectfully call upon your Honourable Board to withhold your sanction to the resolution in question, as being one which must inflict certain hardship upon the poor, and involve the degradation of an honourable profession, should any one be found unscrupulous enough to accept the appointment upon the terms proposed.

Signed on behalf of the Council,
J. L. Bardsley, M.D., President.
J. Aikenhead, W. C. Williamson, } Honorary Secretaries.
Manchester, August 23, 1850.

MEDICAL NEWS.

Obituary.—On the 18th inst., at 2, Priory-parade, Cheltenham, James Williamson, M.D., late H. E. I. C. Bengal Service, in his 82nd year.

We announce, with regret, the death of Prof. Marchand, from cholera, at Berlin.

Aborigines of South Africa.—Mr. Cowood informs us he has received by the "Jane," Captain Gale, from Algoa Bay, on the 12th of this month, three aboriginal natives of South Africa, viz., Caffre man, Zoolu man, and Amapondo woman, which he is now exhibiting at the Cosmorama Rooms, 209, Regent-street. These strangers may perhaps aptly illustrate the works on Race, just published by Dr. Hall, of Sheffield, Dr. Latham, and Dr. Knox.

The Apothecaries' Company *v.* Skoulding.—In this case (tried at the County Court, Wymondham, on the 9th of August) an action was brought to recover a penalty of 20*l.*, incurred by the defendant, a chemist and druggist, at Wymondham, for practising as an apothecary without first obtaining a certificate of qualification, as required by the Act of 55th George III., cap. 194. It appeared that the present defendant had, for some years, carried on a respectable business as a chemist and druggist at Wymondham, and, for the last two or three years, he had been in the habit of visiting patients and dispensing medicines, in Wymondham and its neighbourhood, as an apothecary, without the qualification by law required. It appeared that a correspondence had taken place between Mr. Mendham, the attorney for the Company, and Mr. Drake, of Dereham, as attorney for the defendant, the result of which was, that defendant had consented to a judgment for the penalty sought to be recovered. The learned judge gave judgment accordingly.

The Cholera in Malta.—By accounts from this island to the 13th of August the attacks and deaths on the 11th and 12th, were, the former 69 and 60, and the latter 33 and 31. Although upon the whole island this shows a gradual decrease of the disease, yet in the city of Valetta, and Floriana, its suburbs (the seat of the Central Hospital), there is an increase, inasmuch as on the 11th the new attacks were 9, and the deaths 5; while on the 12th of August the numbers were 16 and 6. Both the military and the naval hospitals were free at the date of our last report. A native village doctor, of the name of Abela, is reported to have discovered a specific, in the administration of which he has been very successful, curing as many as fifteen out of eighteen cases. The Governor, it is said, has urged him to disclose his remedy, but he has refused. The total attacks in the civil population alone (not including army and navy), from the 13th of June to the 13th of August, amount to 1817, and the deaths to 906. Advices from Alexandria announce the breaking out of cholera throughout Egypt, where it has already made many victims, and threatens to rage with a virulence equal to that of its last visitation. Its introduction is said to be traced from Tunis and Malta.

HEALTH OF LONDON DURING THE WEEK.

The health of the inhabitants of London continues as good as it usually is. The deaths last week were 905, which is more by 31 than were registered in the previous week, but less than the average, after excluding the corresponding week of 1849. In that week 2456 persons died in London, 240 of diarrhœa, and 1272 of cholera. The deaths from cholera last week were *five*, from diarrhœa 118; of the latter number 105 were children under the age of 15, 4 adults under 60, and 9 old persons past the age of 60. The deaths by cholera in the five preceding weeks, including the last, were 13, 11, 15, 8, and 5, so that the disease in the form it has usually visited London in August is declining. The deaths from diarrhœa in the same weeks were 104, 136, 152, 139, and 118.

Although the mortality of London is now below the average, that average is itself high. And it appears scarcely to be a natural state of things that, in ordinary times, of 905 persons whose career terminates in the week only 155 pass the age of 60; that *three hundred and eighteen* end their course in the middle of life, and *four hundred and thirty-two* die in their way through childhood to youth. Yet the return gives this result.

MORTALITY TABLE.

Deaths in the week ending Saturday, Aug. 24, 1850.
(Metropolis.)

Causes of Death.	Aug. 24. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	432	318	155	905	10448
Specified Causes	431	318	155	904	10405
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	210	28	14	252	3844
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	4	23	18	45	489
Tubercular Diseases	57	107	2	166	1763
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	30	36	28	94	1111
Diseases of the Heart and Blood-vessels	5	25	6	36	235
Diseases of the Lungs, and of the other Organs of Respiration	30	22	12	64	709
Diseases of the Stomach, Liver, and other Organs of Digestion	19	29	15	63	762
Diseases of the Kidneys, &c.	2	11	4	17	64
Childbirth, Diseases of the Uterus, &c.	...	11	...	11	82
Rheumatism, Diseases of the Bones, Joints, &c.	2	2	1	5	69
Diseases of the Skin, Cellular Tissue, &c.	...	...	1	1	9
Malformations	1	...	...	1	23
Premature Birth and Debility	25	1	...	26	220
Atrophy	31	2	1	34	231
Age	...	...	46	46	455
Sudden	1	5	3	9	87
Violence, Privation, Cold, and Intemperance	14	16	4	34	252
Causes not Specified	1	...	...	1	43

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Aug. 24, 1850.	Sum of Ten Weeks.
London...	1948369	905	10448
West	301189	130	1497
North	376568	182	1841
Central...	374199	127	1886
East	393067	219	2461
South	503346	247	2763

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	25	Heart	32	Phthisis	117
Bronchitis	20	Hooping-cough	25	Pneumonia	29
Cholera	5	Hydrocephalus	24	Scarlatina	19
Childbirth	6	Influenza	2	Small-pox	8
Convulsions	22	Liver	12	Stomach	5
Diarrhœa	118	Lungs	7	Teething	8
Dropsy	13	Measles	11	Typhus	33
Erysipelas	6	Paralysis	18	Uterus	1

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	733	464	269
Females	683	441	242
Total	1416	905	511

METEOROLOGY OF THE WEEK.

Day.	Electricity.*	Rain in Inches.	Amount of Horizontal Movement of the Air.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Ditto. Dew Point.	Mean of Thermometer. Dry.	Mean of Barometer.
Sunday	Nothing was shown at any examination.	0·00	Miles 210	Calm & S.W.	P.M. S.W.	+ 2·5	57·4	64·2	29·709
Monday	Nothing was shown throughout the day.	0·00	250	W.	W.S.W.	— 3·4	45·8	58·2	29·637
Tuesday	Nothing was shown throughout the day.	0·00	120	S.W.	W.	— 3·8	42·4	57·4	29·594
Wednesday	Positive, and at other times negative, with frequently very strong tension sparks and galvanic currents were shown.	0·60	85	Calm.	Calm.	— 9·6	49·4	50·9	29·477
Thursday	Nothing was shown throughout the day.	0·00	100	S.W.	S.	— 7·9	42·6	51·8	29·692
Friday	Nothing was shown throughout the day.	0·00	80	Calm.	S.W.	— 1·6	48·6	57·9	29·800
Saturday	Alternately positive and negative during the morning, with very strong tension; volleys of sparks and galvanic currents were shown.	0·07	110	S S.W.	S.W.	— 0·9	49·7	58·9	29·865
Means		sum 0·67	sum 955	S.W.		— 3·5	48 0	57·0	29·682

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

Mortality in Workhouses in Ireland.—A Parliamentary Return just published shows the rate of mortality per 1000 among the workhouse inmates for the week ending July 28, 1849, in Ulster to have been 5·1. For the same week in 1850, 2·5: in Munster for 1849, 4·8; for 1850, 4·4: for Leinster, 1849, 6·8; for 1850, 2·5: in Connaught, for 1849, 5·7; for 1850, 4·5: total, for 1849, 5·4; for 1850, 3·8. The rate of mortality in Ulster for the week ending the 4th of August, 1849, was 4·7; for 1850, 2·9: in Munster, in 1849, 4·0; in 1850, 4·0: in Leinster, in 1849, 6·4; in 1850, 3·4: in Connaught, in 1849, 5·4; in 1850, 3·7: total in 1849, 5·0; in 1850, 3·7. Another document shows the numbers admitted, relieved, and deceased in the workhouses in Connaught in the half years ending March 25, 1847, '48, '49, and '50, respectively. There are nineteen unions: the workhouse accommodation in 1847 was 15,036; the number relieved, including all admitted into, or born in the houses, during the half year, was 29,393; the deaths, 4466. In 1848 the accommodation was 19,848; the number relieved, 52,926; the deaths, 5163. In 1849, the accommodation was 39,292; the number relieved, 114,204; deaths, 6757. In 1850, the accommodation was 46,523; the number relieved, 83,428; the deaths, 3277.

TO CORRESPONDENTS.

Communications have been received from M. D. "On Sterility;" Dr. John Hutchinson, Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, on the "Diagnosis and Treatment of Pulmonary Consumption," Articles III. and IV.; Dr. Jamieson, of Aberdeen; A. Two Years' Student; P. Q.; An Irish Reader; Mr. Blacklock, of Dumfries, "Of the Cure of Cataract by Absorption; Hon. Secretaries of the Manchester Medico-Ethical Association; Mr. Beckerley, of Wine-office Chambers; Mr. C. A. Dalby, of Ashby-de-la-Zouch, on the "Treatment of Lipoma;" Dr. Gluck; Dr. S. Wm. J. Merriman, of Brook-street, on "Procidentia Vaginæ;" Mr. Franklin Coxworthy, of Canterbury-place, Lambeth-road, on "Evaporation no referrible to heat—the Hygrometer an Imperfect Instrument;" Mr. F. Ct Lucas, Medical Assistant at Dunstable; Mr. Rawson, sen., of Batley, near Dewsbury, on "An Enormously Enlarged Kidney in a New-born Child;" Secretary of the Committee of Poor-law Medical Officers; Argus, of Halifax; Dr. Jenner, of University College, on "Typhus and Typhoid Fevers and Febricula;" Mr. Cooke, of Cornwallis-street, Liverpool, "On Epidemic Cholera;" Mr. Hunt, "On the Medicinal Action of Arsenic in Cutaneous and other Diseases," (2nd Paper); Dr. Muspratt, "On the Influence of Chemistry in the Animal, Vegetable, and Mineral Kingdoms;" &c. &c.

Wardrop on the Heart.—In reply to several letters on the subject of this work, we must refer our correspondents to the Author himself, whose address is No. 2, Charles-street, St. James's-square. We may repeat, however, that upwards of forty pages are now in print, and the work will be carried on as fast as Dr. Wardrop supplies the MS. When completed, it will wait the orders of our subscribers (free of expense) at our Publishers. The best mode of obtaining it will be through the London agents of country booksellers.

We regret our inability to reply with certainty to the queries of a "Two Years' Student." Perhaps some one of our readers can inform us if there be any possibility of pursuing a medical education in an Australian Colony. A University at Sydney has been talked about, and, we believe, there is or was a medical school at Hobart-Town.

*** In answer to several valued friends in Ireland, we beg to state, that though furnished in due course with the late very interesting debate on the Medical Charities Bill in Ireland, by our Irish Correspondent, we see no use in publishing it. "The measure," he informs us, "is at present as much among the things of the past as the books of the Druids. All the small talk in Steeven's-green—the Report of Dr. Maunsell—the mistake of the "two Dromios" of the Apothecaries, and of the "Medical Press," will not mend the matter; the main fact for the Dispensary attendants to consider is, "that the measure has been defeated by some petty intrigue." For ourselves it only remains for us to say, we have used our best efforts to secure so great a boon for the Medical Profession in Ireland; and we trust, when next session it comes again under the notice of the House, we shall again be as ably assisted as we have been heretofore by our friends in that part of the Empire.

Pupil, Kent.—There is a very good library at both Thomas's and Guy's. One o'clock is the hour of visiting.

K., Killarney.—The very silly speech of Lord Glengall was not intended as an insult to the Profession, but to an old friend of his lordship's.

Mr. F. C. Lucas, a Medical Assistant at Dunstable, has, we fear, mistaken our Journal. The tone of his letter is not consistent with the proprieties of the "Medical Times."

We will take an early opportunity to examine the Third Report of the Committee of the Convention of Poor-law Medical Officers.

Dr. Gondret's method of treating intermittent fever by dry cupping has already been noticed in this Journal.

We shall be particularly obliged to correspondents who favour us, to give titles to their communications. It will also be a great accommodation to our printers if gentlemen will write upon one side only of their paper.

The letters of Dr. T. Wm. J. Merriman, Mr. Rawson, sen., and Mr. Cooke, will be published in our next Number. We hope also to find space for communications from Dr. Jenner, Dr. Hutchinson, and Mr. Ebsworth.

We regret the impossibility, in the present Number, to find room for the letter of Argus. It shall be inserted next week.

X. Y. Z. on the Gleet question shall appear next week.

Mr. Nicholson, of Waterside, Pencgles, has bequeathed 500*l.* to the Dumfries Infirmary.

Devon and Exeter Hospital.—There is a vacancy in the office of physician to this hospital, by the resignation of Dr. Pennell, Dr. Samuel Budd, Dr. Elliott, and Dr. Drake were candidates; but the last-named gentlemen have resigned, finding that their opponent has every prospect of success. The 109th anniversary of the institution was celebrated on the 27th instant.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

Licentiate of the Royal College of Physicians, Professor of Pathological Anatomy in University College, London, and Assistant-Physician to University College Hospital.

[Continued from Vol. XX., page 435.]

EIGHTH PAPER.

Having given a brief general description of typhoid fever, I propose to proceed to

AN EXAMINATION OF THE CONDITIONS, SYMPTOMS, AND COMPLICATIONS ON THE VARIATIONS IN WHICH THE DIFFERENCES OBSERVED IN INDIVIDUAL CASES OF TYPHOID FEVER DEPEND.

HÆMORRHAGE FROM THE BOWELS.

There is no single symptom observed in the course of typhoid fever, more alarming to the patient or his friends, than the escape of blood per anum. It occurs most frequently during the third and fourth weeks of the disease, *i. e.*, about the period when the sloughs, so frequently formed in the small intestines, are in the act of separating. Sometimes hæmorrhage takes place after the fourth week, and, in very rare cases, before the termination of the first week. The quantity of blood varies from sufficient only to stain the fæcal matters to a very considerable quantity. It is often of a red colour; sometimes in clots. The alkaline reaction of the stools, in typhoid fever, shown by my colleague, Dr. Parkes, and also the rapidity with which the blood is expelled from the intestine, may account for the absence of the black tint commonly assumed by blood before its escape from the intestine.

Hæmorrhage from the bowels is a very grave symptom, but it is by no means necessarily fatal; of Chomel's seven cases, six died; of seven detailed by Louis, three were fatal. My own experience leads me to regard Louis' as the nearer approximation to the truth. Intestinal hæmorrhage may cause death directly or indirectly: firstly, by producing fainting, from which the patient never rallies,—perhaps he dies in an instant—of this form, the second case (Case 28) narrated in this paper is an example; secondly, by reducing the strength of the patient, and so rendering him unable to bear up against the secondary local diseases that so often complicate typhoid fever.

The gravity of the prognosis is increased by the knowledge that, in a large majority of cases, the vessel from which the blood escapes is laid open by the detachment of a slough, and that consequently, it is highly probable that extensive local disease exists whenever blood in any quantity escapes from the intestinal mucous membrane. I shall hereafter adduce one or two cases to illustrate the fact, that the symptom under consideration is by no means necessarily fatal.

Case 27.—Without known cause, in a man, aged 27, gradual accession of illness. On the 13th day, defect of memory—tremulous muscular movements—loss of appetite—diarrhœa—hoarseness—rose spots, followed by tenderness and gurgling in the iliac fossa—enlargement of the spleen—hæmorrhage from the bowels—quick pulse. On the 21st day, severe rigors, followed by signs of pleuro-pneumonia—rapid pulse—delirium—sloughing of cutis over sacrum—extreme prostration, and death on the 27th day. Sixteen hours after death: ulcers in the larynx, œsophagus, ileum, and urinary bladder—enlargement and softening of the mesenteric glands—abnormal injection of the peritoneum—fibrinous effusion into the cavity of the peritoneum—enlargement of the spleen—lymph and serosity in the pleuræ—lobular consolidation of the lungs.

James W., aged 27, a stout man, with fair skin and light hair and eyes, employed as a labourer on a railroad, was admitted into the London Fever Hospital under the care of Dr. Tweedie, May 11th, 1849. His previous health had been good; he never spat blood, but was subject, on catching cold, to trifling cough; he was of temperate habits; had resided in London ten years, and was not in want; no cause could be assigned for the present attack. After ailing for a week from "cold" and cough, he quitted work May 6th, but continued to leave his bed daily till his admission into the hospital. During the course of his illness he had taken several doses of Epsom salts, hoping "to work off" the disease.

The first notes of his case were taken May 12th, *i. e.*, the 7th day after leaving his work, and about the 13th from the first symptom of illness. His memory was then very defective; he thought he had been in the hospital three days; still he answered questions rationally; he had passed a restless night, and slept but little; there had been no delirium; the conjunctivæ were slightly injected, the pupils rather large; he complained of an unpleasant taste, and some dimness of vision; the expression of the countenance was somewhat heavy; there was no headache, and no vertigo.

He was able to walk up the ward without assistance, and, although his muscular movements were unsteady, he did not feel very weak.

The lips were dry; the tongue moist, loaded, and tremulous; there was no pain nor tenderness of the abdomen; no gurgling in the iliac fossa; the abdomen retained its normal shape; the thirst was considerable, but the man had no appetite. He had passed during the twenty-four hours subsequent to his admission four watery stools.

The pulse was 96 and soft. He suffered from a rather troublesome cough; there was a little sonorous râle on both sides of the chest; the voice was markedly hoarse.

The skin was warm and dry, and over the surface of the trunk were scattered a few imperfectly formed rose spots.

My notes show but little change on the following day, excepting that there was gurgling and some tenderness in the right iliac fossa; the skin was hot and dry, and two or three of the rose spots marked the preceding day had disappeared, others were much paler, and several fresh had appeared; the characters of the latter were perfect. On this day he passed three stools of pulpy consistence.

On the 15th day of disease several fresh rose spots were observed, and some of those present on the 14th day had grown paler. He was reported to have passed a restless night; to have had very little sleep; there was no delirium. The skin at the time of the visit was warm and covered with perspiration; there were no miliary vesicles; the cheeks were flushed; the muscular movements unsteady, although he still left his bed unassisted with facility; the tongue was moist, loaded, and tremulous; there was extensive dulness over the region of the spleen; the abdomen generally was full and resonant; there was slight tenderness, but no gurgling in the right iliac fossa; he had passed three liquid stools; but in one was a small solid mass of fæces. *All the stools were tinged throughout with blood.* There was slight cough, and a little sonorous râle was audible over the entire chest.

For the next five days there was little change; fresh spots appeared occasionally, those previously noted disappearing; although he sweated occasionally, the absence of miliary vesicles was recorded; the tenderness in the right iliac fossa continued; the hoarseness was as on admission. On the 18th day he vomited a little yellow fluid. He passed two liquid stools, containing very little blood, on the 16th day; on the 17th four watery stools, of a reddish brown colour, and *very offensive* odour; on the 18th two liquid stools, of a decided crimson colour, but containing no clots of blood. On the 19th day he had no stool. The general powers had by this time considerably diminished; so that, although still able to leave his bed unassisted, it was with considerable difficulty. The pulse had risen to 120; it was noted to be full and soft. A little mucous râle was heard on the 20th day over the anterior part of the chest.

On the 21st day the following notes were made:—The nurse reports, that about 1 a.m. he had a very severe attack of rigors, which lasted a quarter of an hour. In the middle of it, he appeared to the nurse to lose his senses for two or three minutes; his skin, while the rigors were on, felt hot, and he did not complain of any sense of cold, nor has he appeared chilly since. He began to sweat about twelve last night, and continued to sweat profusely for two hours: he sweated while shivering.

He has had very little sleep, and no delirium. At the

time of the visit, the pulse was 120, small and weak; the respiration 36, and he was suffering from troublesome cough. He was lying on his back; though still able to quit his bed alone, it was with extreme difficulty, and the muscular movements generally were very unsteady. There was a little fine crepitation at the base of the left lung posteriorly. The raw surfaces left by the blisters applied to the chest and side on the 15th and 17th days were very sore. The tongue was moist, covered with a white fur, and very tremulous. He had passed during the 24 hours preceding my visit, three stools, in all two pints, of dirty red fluid, of watery consistence, containing several clots of dark blood of considerable size. The abdomen was full and resonant, and there was some tenderness in the right iliac fossa. There were no miliary vesicles. Orders were given that, on *no consideration*, should he be allowed to quit the horizontal position. He was to use a bed pan. During the night, however, he became, for the first time, very delirious, and, while so, left his bed.

From this till his death, on the 27th day from the first commencement of illness, the pulse continued to rise, so that, on the 25th and 26th days, it reached 150; at the same time it was very feeble. The respirations increased in frequency, and became chiefly abdominal.

On account of the prostration, and the severity and nature of the abdominal symptoms, the chest was examined only so far as to ascertain the existence of the physical signs of pleuro-pneumonia, *i.e.*, friction, crepitation, dulness. At no time was there any expectoration. No fresh spots were observed after the 20th day—no miliary vesicles at any time. The delirium continued, but without violence. Generally wakeful, he dozed frequently on the 25th, but was then readily aroused. The blistered surfaces continued very sore; the cheeks to flush occasionally; the conjunctivæ very pale. On the 23rd day a purple spot, from which the cuticle had partially separated, was observed over the sacrum, and two smaller purple spots, one on either buttock. At this time the tongue became brown in the centre—it was still moist. He was often observed, during the night of the 24th day, picking the bed-clothes. He attempted to protrude his tongue when told, on the 25th day, but its movements were too unsteady for him to accomplish his object.

He passed no stool on the 23rd; on the 24th day, one liquid stool of a reddish colour, with lumps of dark solid stool floating in it. The bowels were confined on the 25th day, but on the 26th he had one solid stool, without any trace of blood.

On the 23rd, it was noted that he continued "very hoarse," and "that his voice was reduced to little more than a whisper." On the night of the 25th, while delirious, he left his bed unassisted. On the 26th day he was so prostrate as to be scarcely able to raise his arm from the bed. On the morning of the 27th day, reckoning from the first symptom of illness, or the 21st, counting from the day he left his work, I noted as follows:—

"Pulse 132, irregular in frequency; respirations 36; expression still more cadaverous than yesterday. Last night the nurse reports that he was very delirious, and attempted to quit his bed; tongue dry and brown; no stool; much less fulness, but slight tenderness of abdomen; no sleep night nor day; no coma vigil."

He *died* at a quarter to nine the same evening.

An examination of the body of James W. was made *sixteen hours after death*, the weather being warm and dry.

There was no appearance of decomposition. Cadaveric rigidity was well-marked. There was some purplish discoloration of the most depending part of the body. The loose cellular tissue superficial to the *recti abdom.* was infiltrated with blood; there was no distinct clot.(a)

Head.—The pia mater was somewhat more vascular than natural. There was a little serosity beneath the arachnoid. The grey matter of the brain had a pinkish hue, and the red points in the white substance were more numerous than usual. The consistence of every part of the brain was normal. The plexus choroides was pale; a little colourless transparent serosity was found in the lateral ventricles, and at the base of the brain.

The *Pericardium* was healthy.

Heart.—Tolerably firm, and large clots were found in the cavities of the heart.

The substance of the organ and its valves were perfectly healthy; it was slightly hypertrophied.

Larynx.—The chordæ vocales were decidedly thicker than natural, and on the left chorda were three small superficial ulcers, with pale edges. The mucous membrane of the larynx generally was pale, and of normal consistence.

Lungs.—Lymph and serosity in the pleuræ proved the existence of inflammation of that membrane during life. There was pretty extensive granular and non-granular lobular consolidation, especially affecting the posterior parts of the inferior lobes. There was no trace of tubercles.

The *bronchial glands* were large and dark.

The lining membrane of the *bronchial tubes* deep red.

The *pharynx* was pale and healthy in aspect.

In the *œsophagus*, about 2 inches below the pharynx, were four ulcers, each from two to three lines in length; they were quite superficial; their edges and floors pale.

The *stomach* was contracted; its mucous membrane was very rugose. There was much punctiform redness of the mucous membrane, near the cardiac orifice, and at the red parts it was softer than elsewhere. The pyloric half (excluding 2 inches next the pylorus) was mammillated. There was no trace of ulceration of its lining membrane.

Small Intestines.—The mucous membrane of the jejunum and ileum was somewhat softer than natural. The free margins of the *valvulæ conniventes* were thickly studded with red *puncta*.

From the upper portion of the ileum, shreds of mucous membrane half an inch in length were obtainable with facility.

About 7 ft. above the ileo-cœcal valve, on one of Peyer's patches, was a thickened spot, the thickening being due to increased thickness of the mucous and submucous tissues. The centre of this spot was occupied by an ulcer three lines in diameter; the edges of the ulcer were red; its floor was formed of transverse muscular fibres. About 14 inches lower in the gut was another and similar ulcer; and, from that point downwards, every Peyer's patch was very extensively destroyed by ulceration. The edges of the ulcers overlapped the floors, the latter being covered with a tough, thick, amorphous, sloughy-looking substance, or it was formed by the naked transverse muscular fibres. In one or two of the ulcers the centre of the floor was formed by longitudinal muscular fibres, and in two the peritoneum was exposed. The ulcers increased in size as they approached the ileo-cœcal valve. High up the intestine the edges of the ulcers were bright red; next the cœcum they were deep grey.

Between these oval ulcers were many smaller circular ulcers, the latter varying in size from a pin head to half an inch in diameter. As the larger oval ulcers were evidently seated on Peyer's patches, so these smaller circular ulcers appeared to occupy the situation of the solitary glands. Thickly scattered over the lower four feet of the ileum were minute elevated white points; they were about the size of small pin heads, and were evidently due to some change in or beneath the glands. The mucous membrane of the last 12 inches was decidedly softened; higher up it retained its normal consistence.

The *large intestines* were healthy in all particulars.

The *mesenteric glands* were large, varying in size from a pea to a large nut,—soft, friable, and of a pale yellowish red colour. The largest were those in the vicinity of the ileo-cœcal valve.

There was no enlargement of the *lumbar or mesocolic glands*.

The *peritoneal cavity* contained about twelve ounces of transparent yellow serosity, in which floated a transparent, yellowish, jelly-like mass of considerable size. By pressure it was converted into an opaque, stringy, elastic substance, much smaller than the original mass.

The serous membrane lining the abdominal parietes was more opaque than natural, and through it could be seen much capillary injection. The vessels of the peritoneum corresponding to the ulcers in the ileum were also finely injected with blood.

The *liver* was pale and flabby; its acute margin was overlapped by the transverse arch of the colon. The *gall bladder* distended with thin greenish-yellow bile; its lining membrane healthy in all respects.

The *pancreas* was pale and firm.

The *spleen* weighed 10½ oz.; its vertical diameter was 7½ in.; its antero-posterior, 4 in. It was dark and firm.

The *kidneys* were congested, but appeared otherwise healthy.

(a) Dr. John Reid observed only four examples of effusion of blood into the cellular tissue, without external violence, out of 500 bodies he examined. He regarded the fact of importance in a medico-legal point of view. See Phys., Patholog., and Anat. Researches, by Dr. J. Reid, p. 510.

Their pelves were somewhat more injected than usual. The *ureters* were pale and healthy.

The *bladder* was contracted and contained very little transparent yellow urine. Its lining membrane was minutely injected; on its anterior surface were numerous minute scarlet points; its posterior surface had a purplish hue. Scattered over the anterior and posterior surface were numerous patches, of a dirty yellow colour, distinctly elevated above the level of the adjacent mucous membrane. At some places the yellow substance, by the effusion of which these patches were formed, was removable without injury to the subjacent membrane; at others it appeared to be incorporated with the latter. The mucous membrane immediately around these yellow patches was of a vivid scarlet or of a deep purple colour, gradually shading off. Here and there the surface of the mucous membrane was destroyed by minute superficial ulcers. The aspect of the whole mucous membrane was identical with that of the large intestine in some forms of dysentery.

The *ganglia of the solar plexus* were carefully dissected out, and appeared perfectly healthy.

This case illustrates certain facts common in typhoid fever, viz., the gradual accession of the illness. J. W. felt unwell a week before quitting his work. He continued to move about the house, more or less, for a week after he quitted his work, and was able during the fourth week to reach the close-stool without aid. As a rule, it is better to date the outset of the disease from the first sense of illness. Men of the age, and in the rank of life of J. W., continue their employment as long as they are able, taking but little heed of that which others might consider serious ailment. In estimating the period of any two given diseases at which persons affected with either take to their beds, it is essential that persons in the same rank of life only, as near as may be, should be counted.

2ndly. His memory was defective. He thought time prolonged: thus, after having resided in the hospital twenty-four hours, he stated he had been there three days. At the same time there was no delirium.

3rdly. The pupils were fully as large as natural.

4thly. The stools were numerous and watery.

5thly. Sonorous râle was heard over the whole chest.

6thly. There were rose spots on the trunk when he first came under observation. These spots ran their ordinary course, *i. e.*, they remained for two or three days and then disappeared—fresh spots making their appearance every day or two, without relation to those which preceded them.

7thly. Flushing of the cheeks; a transient but frequently recurring circumscribed pink flush on one or both cheeks is one of the most constant symptoms in typhoid fever.

8thly. The splenic dulness was extensive.

9thly. The shape of the abdomen and its resonance, and the gurgling, were all signs common in well-marked cases of typhoid fever.

It is important to observe, that perspiration pretty copious in quantity occurred repeatedly, without any relief to the symptoms. Louis pointed out the tendency of blistered surfaces to ulcerate in typhoid fever. This case illustrates the fact.

With reference to the hæmorrhage, it may be remarked, that this man had, before his admission, taken repeated doses of an irritating purgative.

Blood was first observed in the stools on the 15th day. The colour of the stools was, as is usual in typhoid fever, more or less red. The reddish brown colour and peculiarly *offensive* odour noted on the seventeenth day are very common characters of typhoid stools, containing a moderate quantity of blood. The clots, on the following day, indicated that the blood had been poured out rapidly, and, therefore, probably from a vessel of some size; blood is never poured out from the general surface of the intestine in typhoid fever, its escape is invariably due to destruction of tissue of appreciable magnitude—ordinarily, as I have before said, in consequence of the separation of a slough of some size laying open one or more veins or arteries. The condition of the bowels and the character of the stools the last four days of his life are interesting. The bowels were confined, or he passed only a small quantity of solid stool, in which there was no trace of blood. This man did not then die, as the next case did, from the hæmorrhage directly; but indirectly, the loss of blood, perhaps, might have tended to bring about the fatal termination. The hæmorrhage occurred at that period of the disease when he was the least able to bear it. Although he had just lost a considerable quantity of blood, inflammation of the lung and pleura set in early on the morning of the twenty-first day. The blood-letting did not prevent the supervention of the pleuro-pneumonia.

The attack was ushered in by severe rigors. Louis regards the occurrence of rigors in the progress of typhoid fever as invariably indicating the establishment of local inflammation. This case illustrates and supports his position. It affords an example of serous inflammation being set up in the course of typhoid fever. The *frequency with which the pleura becomes the seat of inflammatory action*, and of the effusion of lymph, will be abundantly evident from the cases given in these papers. Recent adhesions were found in the pleura of Fanny P., case 24; and I shall have occasion to point out the same lesion in several other cases. The tremor of the tongue and limbs, out of all proportion to the mental aberration, were important signs, as indicative of extensive intestinal disease. I shall advert to this fact when commenting on the next case. The delirium, when it did occur, was of the character common in typhoid fever: the patient frequently left his bed—it was active. The occurrence of carphology—a dry, brown tongue—extreme prostration—sloughing of the sacrum, and the continuance of active delirium, taken together, showed how deeply the nervous system had at last become involved.

The recorded particulars of the examination after death of the body of J. W. very clearly prove that typhoid fever is *not* an inflammation of the brain. The ulcer on the chorda vocalis, and the thickening of the substance of both chordæ, afford a ready explanation of the hoarseness. No symptoms during life had indicated the ulcers in the œsophagus. The gastric mucous membrane, although not healthy over its entire surface, was too slightly affected for us to consider its lesion to have been the cause of the grave symptoms from which James W. suffered.

The ileum offered a good example of one form of the anatomical character of typhoid fever,—the *plaques molles* of Louis. The ulcers were seated on Peyer's patches; they increased in extent as they approached the ileo-cœcal valve. The floors of the ulcers were formed, according to the depth of the ulcers, by submucous cellular tissue, transverse or longitudinal muscular fibres, or peritoneum. It is rare to find the *longitudinal* muscular fibres forming the floor of an ulcer; the *transverse* are constantly exposed. Perforation must shortly have followed. The thickening of the patches was due—as in case 24—to increased thickness of the mucous and submucous coats, and not, as in the next case—Case 28—to a deposit in the substance of the sub-mucous cellular tissue,—*i.e.*, the *plaques dures* of Louis. The solitary glands were affected in the same manner as the agminated. The softened condition of the mucous membrane of the lower twelve inches was of secondary moment. The presence of a fibrinous clot in the peritoneal cavity is interesting. Was it the result of inflammatory action set up in the peritoneum corresponding to the ulcers of Peyer's patches? That portion of the peritoneum is often covered by recently formed false membrane,—an attempt on the part of Nature to guard the peritoneum from perforation. I have before adverted to the condition of the bile in typhoid fever. It presented in this case the characters ordinarily observed in the affection referred to in contradistinction to those presented by it in typhus fever—*i.e.*, thickness of consistence and darkness of colour. The urinary bladder had evidently been the seat of inflammatory action during life. The dirty yellow elevated patches, and the ulcers on its mucous membrane, bore evidence to the extent it had partaken of the general disease.

The reader's attention is requested to the condition of the abdominal portion of the sympathetic nerve. Rokitansky, and some other German observers, have stated that nerve to be invariably diseased in typhoid fever. In this case, as well as in some others I have examined—in one examination I was assisted by my friend Dr. Beck, than whom no one can be better able to give an opinion as to the healthy structure of the sympathetic—the great abdominal ganglia and plexuses offered in all particulars the characters of health. This remark applies to cases of typhus and typhoid fever.

Taken as a whole, the most striking circumstance revealed by the examination of the body of J. W., was the number of organs that had during life been the seat of ulceration—larynx, œsophagus, ileum, colon, and urinary bladder; and of those that had suffered from inflammation, pleura, lungs peritoneum, &c., &c.

Disseminated inflammations, disseminated ulcerations, these are the two features eminently characteristic of typhoid fever.

Case 28.—Without known exposure to contagion—in a male, aged 23: headache—trifling rigors—confined bowels—nausea—slight increase in frequency of pulse—loaded, moist, tremulous tongue—finally, loss of appetite—little sleep—muscular movements tremulous—one rose spot—hæmorrhage from the bowels, and death from fainting on the twenty-fifth day of disease.

Thirty-six Hours after Death.—Marked cadaveric rigidity—thickening and ulceration of Peyer's patches, and of the solitary glands, of the large and small intestines—enlargement and softening of the mesenteric glands—enlargement and softening of the spleen.

Peter A., aged 23, 5 feet 3 inches in height, moderately stout, fair skin, dark hair and eyes, by trade a carpenter, was admitted into the London Fever Hospital, August 28, 1847. He was a man of temperate habits; he had lived in London sixteen months only; he attributed his present illness to exposure to damp and cold. The first symptoms were headache, slight rigors, pain at the epigastrium, and nausea. He had epistaxis the day before his admission. His bowels were confined from the outset. I saw him for the first time the day after his admission—*i.e.*, on August 29, the eleventh day of illness. At this time the man appeared to ail very little. He slept well; his mind was perfectly collected, his memory good. There was a little headache, and some vertigo when he stood erect.

There was no marked loss of strength, he left his bed unassisted with perfect facility, and could walk without aid; nor did he complain of any particular sense of weakness.

His tongue, loaded with yellowish fur, was tremulous; yet he had some appetite, and there was no thirst. There was no abnormal fulness of the abdomen, but he made slight complaint when it was pressed firmly. His bowels were confined. The pulse was 80, regular, soft; there was no cough, with the exception of a faint soft murmur with the first sound of the heart heard at the base only; there were no abnormal physical chest-signs.

The skin was warm; there were no spots.

Half an ounce of castor-oil was ordered to be given directly, and a little simple saline medicine every six hours.

On the following day the tongue was cleaner; the castor-oil had acted three times; he said he had slept well.

Sept. 1st, *i.e.*, the fourteenth day of disease.—Pulse 80; tongue cleaning; two stools.

Sept. 4th, *i.e.*, the seventeenth day.—Pulse 80; no stool; tongue still furred posteriorly; appetite returning.

Sept. 7th, *i.e.*, the twentieth day.—Pulse 84; tongue furred and tremulous; two stools; a little appetite.

On the twenty-second day his pulse had risen to 96. He complained of want of sleep; there was no headache; much thirst; a total loss of appetite; and not only was the tongue, which continued moist and furred, tremulous, but the whole of the muscular movements were unsteady, yet he sat up in bed quickly when bid, supported himself without aid, and with facility left his bed unassisted. One rose spot was observed on his back.

On the 24th day of his illness, about half-past one a.m., I made the following note:—

Pulse 96—slept but little—mind unaffected—tongue rather dry—a little pale brown fur in its centre—two stools the last twenty-four hours.

In about half an hour I was recalled in haste to his bed.

He had placed himself on the close-pan as soon as I had quitted the ward. The nurse observed him turn pale and assisted him on to the bed. The close-pan was half full of a reddish fluid mixed with large dark clots of blood. There was no fæculent matter. His whole surface, although warm, was pallid. The abdomen was full and resonant—there was no tenderness.

Four discharges of blood, very large in quantity, followed; the last at four a.m., when he fainted, and died instantly.

Examination of the Body of Peter A., Thirty-six Hours after Death.—Weather cool. The cadaveric rigidity was well marked, (even fifty hours after death)—the surface was markedly bloodless. There was no appearance of decomposition; very little fat on the abdominal or thoracic parietes.

Head.—The membranes and substance of the brain were very pale, and in all other particulars healthy.

The *pericardium* contained a little transparent yellow serosity.

Much dark fluid blood escaped on dividing the aorta, pulmonary artery, veins, and venæ cavæ. The cavities of the heart were empty.

Heart.—The substance was pale and flabby. There was a little thickening of the free edge of the aortic valves, and some beadingof the free edge of the greater section of the mitral valve.

The *larynx*, *trachea*, *bronchial tubes*, and *lungs* were healthy, excepting a few old adhesions between pulmonary and costal pleura. The *bronchial glands* converted into putty-like and cretaceous matter.

The mucous membrane of the *pharynx* and *œsophagus* was pale and healthy; that of the stomach slightly rugose, pale, not mammillated, and of normal consistence.

The *mesenterie glands* were enlarged,—some were as big as filberts,—the largest corresponded to the lower part of the ilcum. Their colour varied from pale purple to greyish yellow. In the centre of several was an opaque deposit, of a yellowish white colour, and of a soft and friable consistence. About 3½ yards above the ileo-cœcal valve was one of Peyer's patches, opaque and thickened at intervals. On the next patch were two or three thickened spots, each three-eighths of an inch in diameter. The *deposit* to which the increase in thickness was due was of a pink colour, and had its seat in the substance of the submucous tissue. The mucous membrane covering this patch was pale and softened. From this point to half a yard above the ileo-cœcal valve, every patch was more or less similarly affected. A few of the solitary glands between the patches were also enlarged.

Every patch in the last half yard of the ileum was ulcerated; the floors of some of the ulcers were covered with an opaque, yellow, and structureless mass; in others, the transverse muscular fibres were exposed, or covered merely by a thin layer of submucous cellular tissue.

Water thrown into the superior mesenteric artery, welled forth from the edge of one of the ulcers. The solitary glands between the patches were considerably larger than natural; the mucous membrane on their apices softer than natural.(a)

Large Intestines.—The mucous membrane of the *cœcum* was of a deep grey colour, but normal in consistence and thickness; that of the colon bright red mottled with grey. Scattered over it were several round spots, about a line in diameter, considerably elevated; their centres white and opaque; their bases grey. In some places, the central white spot had partially separated, a line of ulceration having been set up around it. Here and there the little white slough had separated, and a small ulcer marked the spot it had formerly occupied.

The *liver* was pale, its consistence good.

The *spleen* was large, it weighed thirteen ounces; it was soft but not pulpy.

The *kidneys* and *urinary bladder* were in all respects normal.

This case is one of marked interest. It affords an illustration of what has been termed latent typhoid fever. The man, on his admission, appeared to be suffering from slight gastric disturbance: the foul moist tongue, the partial loss of appetite and absence of thirst, with slight tenderness of the abdomen, and pulse scarcely accelerated. A gentle purgative, rest, and abstinence, it was supposed, would soon restore Peter A. to health. The tremulous state of the tongue, however, awakened some suspicions, especially as the man affirmed that he was of temperate habits. Yet who can trust to the affirmation of hospital patients on this head? (b) The continuance of the tremulous condition of the tongue, on the 20th day of disease, and the 10th of his residence in the hospital, even though the tongue was cleaner than on admission, and he had a little appetite, was a very grave symptom. The general muscular unsteadiness, increase in the frequency of the pulse, want of sleep, and the rose spot, rendered the probability still higher, that the man had typhoid fever; but one cannot say that all doubt was dispelled till the occurrence of that symptom, which at once rendered the diagnosis certain, and the prognosis most grave. If the extent of the splenic dulness had been percussed out, less doubt would, perhaps, have been entertained as to the nature of the case. Three years' experience, since this case came under observation, has led me to attach extreme importance, in typhoid fever, to muscular tremor,

(a) For a more minute description of the intestines in this case, see papers reprinted from the *Edinburgh Monthly Journal*, p. 57.

(b) The majority of hospital patients should be asked not if they drink, but *when* they were drunk last.

when unaccompanied by mental disturbance of a grave character, as indicative of extensive ulceration, or, rather, of *deep* destruction, by ulceration or sloughing of the agminated glands. In these cases, hæmorrhage and perforation are very common. Not long since, I ventured, from the muscular tremor being, in a temperate man labouring under typhoid fever, out of all proportion to the mental abnormal phenomena, to write to a friend in daily attendance on the case, but who was unable to meet me, that he must beware of hæmorrhage or perforation. I visited the patient again in a week, and was met by the cry of the nurse, "Oh, Sir, he has just passed such a quantity of blood!" and the same evening, on seeing the patient again, by "Oh, Sir, he is in such pain—he has been screaming with agony." Perforation had occurred.

The absence of diarrhœa—nay, the presence of constipation—is another symptom which may mislead the inexperienced; it is, however, by no means a very rare occurrence in typhoid fever. I shall have occasion to refer to more than one example. No more striking illustration of the absurdity of supposing prostration, a dry brown tongue, hot skin, and delirium, to be the essential symptoms of fever, could be offered than that of the case of Peter A. No more striking proof of the imperfect character of the description of fever contained in English systematic works on medicine. Typhoid fever is a *very common* disease, especially in young persons; it is the endemic fever of London; but, from its latent character, *i. e.*, from its being frequently unaccompanied by Cullen's diagnostic characters, it is misunderstood, and too often maltreated by the patient, his friends, or his medical advisers. *E. g.* My own case, referred to in the first of these papers.

The examination after death proved that a small branch of the mesenteric artery had been opened by the detachment of a slough, illustrating my assertion, that hæmorrhage from the bowels, in typhoid fever, has its origin in destruction, either in mass or molecular, of the intestinal coats.

The duration of typhoid fever is from twenty-one to thirty days. There was no attempt at reparation in this case; in fact, the fever had not run its full course. The lesion of the patches was that described by Louis as *plaques dures;* there was a deposit of a non-vascular substance in the substance of the submucous coat, and to the presence of this deposit the thickened state of the patches was due. A similar substance was found in the mesenteric glands. It appears probable, that by about the thirtieth day of disease the whole of this *almost* structureless deposit, acting as a foreign body, is thrown out by sloughing from Peyer's patches. Whether it is ever there metamorphosed and absorbed, as in some cases it unquestionably is from the mesenteric glands, (an example of which I propose to lay before the reader in a subsequent paper,) admits of doubt. The condition of the mucous membrane of the large intestine was interesting, as exhibiting one mode in which ulceration of that membrane commences. The spleen presented the characters it so often does in typhoid fever: it was considerably enlarged, and softer than natural. In these particulars it resembled the spleen of Fanny P., Case 24, who died, it may be remembered, on the 23rd day of disease, and that of James W., Case 27, who died on the 27th day. In Jane T., case 23, who survived till the 33rd day, the spleen was rather small, but then its corrugated surface rendered it probable that in her, too, at some earlier period of the disease, it had been enlarged. These observations accord with those made by Louis; he found that, in the forty-six fatal cases he analysed, it was between the 20th and 30th day of the disease that the organ in question attained its maximum size; and that, after the 30th day, it appeared, gradually, to return to its normal dimensions.

REMARKS ON PREMATURE BIRTH,
WITH A CASE IN WHICH A CHILD, BORN IN THE BEGINNING OF THE SIXTH MONTH, WAS REARED.

By W. T. BARKER, M.D.,
Physician to the Dumfries Royal Infirmary.

Authentic instances of viability in children prematurely born, especially during the sixth month, are so interesting, and of so much importance in a medico-legal point of view, that every case should be recorded where the data are at all perfect, that we may have as much light as possible thrown upon the subject. The preponderance of medical authority is opposed to the viability of children born at such an early period of gestation, at least for any length of time. Thus, Dr. Beck says, that "between five and six months there have been instances of infants living, though most rare; and even at seven, the chance of surviving six hours after birth is much against the child."(a) Dr. Traill says, "At seven months the organs are so developed that a child may be considered as *viable*,"(b) Dr. William Hunter's opinion is still more decided, and is given in the following words:—"We see none born with powers of coming to manhood, or of being reared, before seven calendar months, or near that time. At six months it cannot be."(c)

The experience of the late Dr. Hamilton, of Edinburgh, led him to the same conclusion, and he regarded all accounts of children living to maturity, who were brought forth at the fifth or six month, as fabulous. The following is said to be an extract from his lectures:—

"I lately brought a child into the world a few days after the completion of the sixth month, which, to my surprise, was alive, and which lived nearly three days: this is the longest period that I ever knew so early a fœtus live."(d)

The late Dr. Burns was not quite so decidedly opposed to the supposition, as he says that "the fœtus is now so vigorous in its action, that there have been instances, though most rare, of its continuing to live, if born at so premature a period." (e)

There have been several instances recorded of late of such premature children living for a few days, but only for a few days. The great size and weight of the children, however, in some of them, militate against the correctness of the period of gestation assigned to them. For example, in the *Edinburgh Monthly Journal of Medicine* for March, 1842, a birth about the end of the fifth month is recorded, where the child lived six days, but it weighed two pounds eight ounces, and measured fourteen inches. In the *Gazette Médicale de Strasbourg* for March, 1848, is another, where the child, born in the sixth month, measured fourteen inches, weighed two pounds, and lived one day. A case is mentioned in the *London Medical Gazette*, March, 1848, in the trial of Ann West, a midwife, at Nottingham, for procuring abortion, in which the child was born some time in the sixth month, and lived five hours. In the *Medical Times* of the 16th of February 1850, we find the case of a child born at six months and a half, which lived thirty-eight hours. The case detailed by Mr. Annan, of Kinross, in the *Medical Times* of the 17th of June, 1848, is a very important one, as the length and weight of the child correspond with the period of gestation assigned to it; and, as the child was continuing to do well till Mr. Annan's communication appeared, I trust it is doing well still.

In the present case the size and weight of the child corresponded with the period of gestation at which it was born. The period was calculated from the time of conception, as indicated to the mother by her sensations *post coitu*. She has now had three children, and, at each conception, has felt the same sensations so powerfully, that, on questioning her as to her certainty of their being contemporaneous with conception, and arising from it, she is quite decided that they were. The only circumstance that would militate against the correctness of her calculating from them is, that her first child was born in the middle of the seventh month from the sensations attributed to conception; but its size, &c., corresponded to that period. The birth of her third child, which was at the full time, corresponded exactly to the date of the same sensations.

Mrs. A. (aged 30) weaned her first child on the 17th of November, 1846, a fortnight after which (1st December) she menstruated naturally. Two days after the catamenia disappeared (7th December,) she conceived, having the same sensations *post coitu* which she felt at her previous conception. At four months she quickened. She was delivered (by a midwife) of her second child, a female, on the 14th of May, 1847—on the hundred and fifty-eighth day of gestation. The child had only rudimentary nails, and almost no hair, except a little, of a slightly reddish colour, at the lower

(a) Elements of Medical Jurisprudence.
(b) Outlines of Medical Jurisprudence.
(c) Beck's Medical Jurisprudence.
(d) Beck's "Medical Jurisprudence."
(e) "Principles of Midwifery."

part of the back of the head. It weighed one pound, and measured eleven inches. It was merely wrapped up at first, laid in a box about a foot long, used by the father (who is a slater) for carrying nails, and set on the kitchen fender, before the fire, to keep it warm. It came on very well, and was subsequently treated very much the same as other children, except, perhaps, that it was a little more looked after than usual, being considered a curiosity. She is still of small make, but is quite healthy, and takes her food well.

I have now attended the family for four years and a half, and have watched her since her birth, but my professional services have never been called for on her account. I took notes of the case, and have now much pleasure in transferring them to the valuable pages of the *Medical Times*.

Dumfries, 20th August, 1850.

PAUPER PRACTICE.

By ALFRED EBSWORTH, Esq., M.R.C.S.

[Continued from p. 118.]

MIDWIFERY.

The advertisements for medical officers to Poor-law Unions usually hold out "a very taking bait,"—"Midwifery cases 10s. 6d., according to the orders of the Commissioners,"—which, in proportion to the population to be attended, would give a considerable increase to the salary. But what is the state of the case? the poor women can seldom obtain an order for the doctor; they are driven about from pillar to post, *threatened* with the workhouse, called bastard breeders by the overseers, and the husbands are bullied by the relieving officers. Thus the salaries are reduced, and instead of simple we have to encounter the most difficult and complicated cases upon a moment's notice, without a moment's reflection. Why should the pauper be treated differently to a private patient? Why should not the *enceinte* pauper have the same opportunity of communicating with and engaging her surgeon? A young girl, unfortunately for herself and family, becomes pregnant; she applies for an order; an admission is given her, instead, into the workhouse; she cannot bear the idea of being separated from her mother, her only consolation in the critical moments of childbirth; she will not accept the offer. Time wears on, and we are perhaps called to attend her in the middle of the night; on examination, the arm is the presenting part; she has few pains, the external parts are cold, with little lubrication, and she lies before you almost inanimate and scarcely capable of bearing down to a single pain. You have no order, but you must employ every faculty of your mind to alleviate her dangerous condition; give, therefore, stimulants; rouse the uterus into action, and proceed, when this is established, to turn; place a pillow on the floor; pass your left hand into the cavity of the sacrum; feel for the thighs, and bring one or both into the world; if one, first secure it by a tape, and then search for the other. During your attempts, in all probability uterine action will have been fully established, and the delivery becomes effected easily. Then succeeds a violent and frightful hæmorrhage, which you restrain by cold applications, bandaging, plugging, &c. You give three months' after-attendance, and the Board of Guardians resist your claim to compensation, on the ground that the child, not being six months advanced, could not have been born alive; therefore the attendance is one of ordinary sickness. That the Poor-law Commissioners should suffer such a brutal interpretation for the sake of a few paltry shillings saved to a parish, is to me a matter of the greatest surprise; that a better provision be not made for puerperal women is a matter of regret; that tinkers, tailors, *cum hoc genus omne*, should have the power, according to their weak intellects, of giving orders in emergent cases only, and refusing altogether the consideration of them, when time is allowed to take the case before the Board, is a system that requires amendment, reconsideration, and abolition.

I mention the difficulty of obtaining orders for midwifery, to point out the disadvantages the Poor-law Medical Officer labours under in the treatment of his cases. In a large district, therefore, he must always be in readiness for an expeditious ride to his case: there must be no waiting, or the case may be dead before he arrives. A good cob, some strong tincture of secale, a catheter, a pair of scissors, and some thread, must be the companions of his journey, for in all probability the case lies in a gipsy's tent, or in some such hovel.

When you arrive, you perhaps find the woman in labour, and delirious with fever—three or four children lying by her side with the same complaint. Now, the case is simple as regards the labour, but dangerous in consequence of her condition. What must you do? It is clear the woman must not lie and die there, for the evening air and moist ground will certainly destroy her if she gets over her confinement. The best thing, therefore, to do, is to mount your nag, and hurry off to the assistant-overseer and procure a cart to take her to some house, or into the Union; and, remember, whatever you may consider necessary, the overseer is bound to supply—brandy, lemons, tea, gruel, &c.: and every word which emanates from your lips ought to be obeyed by him to the strictest letter. You have now procured your cart and bed to lay the patient and the patient's children upon. What must you do now? Why, jump into the cart with them or the driver, and attend to the woman if the jolting increases her pains. Having arrived at the workhouse, your duty is at an end, unless you are surgeon to it. But in these establishments, if you will, you have every comfort, and even luxuries, for your sick paupers. You may either make a workhouse a model hospital, or you may convert it into a sink of disease—a pest-house—by your attention or inattention.

In London, or in large towns, the medical man is surrounded by his brother chips, who can aid and advise with him in cases of difficulty. Not so with the Poor-law doctor; he must have his brains at his fingers' end, and be as courageous as a lion when he comes across a difficulty. It is of no use a man accepting these appointments who has not had ample experience; the flash student, the idle, and the stupid, are sure to be floored when they are tested by such experience as a Poor-law one. They must stand or fall, or else league with the other officials to curtail the expenditure of the parishes, by withdrawing medical relief, and so gain the uncertain applause of the Board, who would otherwise crush you for your ignorance.

In my next I shall take up cases of midwifery as they are met with in pauper practice, laying down, here and there, a rule for action, and then proceed to other diseases of women, both real and feigned.

Bulwell, Nottingham.

DIAGNOSIS AND TREATMENT OF PULMONARY CONSUMPTION.

By JOHN HUTCHINSON, M.D.

Assistant-Physician to the Hospital for Consumption and Diseases of the Chest.

[Continued from p. 195.]

No. III.

III. ABNORMAL BREATHING-SOUNDS.

As pulmonary consumption advances towards its last stage the lungs become more or less infiltrated with morbid secretions or tubercular matter; they are, therefore, altered in density and in structure. We have found that if the mean density of the healthy lung be expressed by 36, that of the tubercular lung (in 100 cases) is as 68, and the greatest density as 110. Such organic change necessarily alters the natural breathing and vocal sounds. The density of the lungs is measured by *percussion*, and the *breathing* and *vocal* sounds by auscultation.

As there are bronchial tubes, capillary tubes, and terminal air-cells or vesicles, all conjoined as one tapering tube, it follows, that a given volume of air, in passing through a series of such tapering tubes, gives to the ear different impressions, such as large and small sounds. Moreover, as tubercular matter is first crude and dry, then soft and moist, and as inflammation may increase the mucous secretions in these tubes, there are other impressions given of dry and moist sounds; therefore we have large and small dry sounds, and large and small moist sounds.

This increased density of the lungs can readily be imagined to obstruct the inspiratory volume of air, as it pene-

trates the pulmonary substance, and so modifies the natural breathing sounds; first, in *intensity*, as strong, feeble, or deficient, or absent; secondly, in *rhythm*, as frequent, quick, slow, jerking, difficult, long, and short; and, thirdly, in *character*, as harsh, bronchial, or cavernous.

The vocal sounds, likewise, are altered by such morbid secretions; the terms, however, of large or small, dry or moist, are not given to the abnormal vocal sounds; but healthy sounds are borrowed from other parts of the lungs, and the terms selected are pectoriloquy, bronchophony, and vocal resonance. All the morbid pulmonary sounds glide into each other, and hence there are *transition* sounds, to which the preposition *sub* is prefixed by some observers; but we are not disposed to adopt this term for many reasons, particularly as the great utility of the stethoscope can be effectually comprehended without it.

There are some chest-sounds very commonly, and others very rarely heard; we shall here omit the rarer sounds, because they seldom require the treatment of the case to be changed: we therefore shall notice those sounds, which must be known as essentials, of every day occurrence, and without which we have no stethoscopic evidence of pulmonary consumption.

Cough.—The earliest morbid sound of consumption is cough; it is almost uniformly present, the mucous membrane of the air-tubes being highly irritable when tubercular infiltration threatens the lungs. At first it is a small, insidious, short, dry cough, frequently first noticed by a friend. It appears without any obvious cause. Slight changes of the weather, from heat to cold, and from cold to heat, or dry to wet, &c., quickly increase or diminish it; so that a few cool days cause a uniform complaint from the mass of patients, "My cough is worse." The phthisical cough is generally first noticed in the morning, with expectoration. Frequently the sudden exposure of the person from the warm bed to the colder air of the chamber excites it. Afterwards it is noticed at "bed-time," the body being again suddenly exposed to a quick transition of temperature. In time the patient is more or less disturbed, and hence the common remark, "I cannot sleep for coughing." Cough is more or less present throughout all the stages of consumption, being (probably) necessary to clear out the air-passages, or the patient would be more incommoded or suffocated.

Increased Density of the Lungs.—The brilliant discovery of Avenbrugger, about 100 years ago, taught us to measure the density of the lungs by percussion. It is instructive to contemplate, that what we now perform in one and the same minute,—percussion and auscultation,—primarily required two men, with an interval of a life-time between, to discover. The manner of percussing is very different. We have seen the late Dr. Edwyn Harrison detect the *presence* and *situation* of a piece of lung not so large as a pigeon's egg, when plunged (unknown to him) into a thorax filled with water. He placed the third, or sometimes the three middle fingers of his left hand *perfectly flat* upon the thorax for a pleximiter, and struck them, with different degrees of force, with the *flat* surfaces of the three corresponding fingers of the right hand. The whole flat hand percussing over the flannel waistcoat, or the hand covered with a (thread) glove as Avenbrugger mentions, we like much for examining a large region.—(Avenbrugger, p. 32, § 11.) Indeed the flat hand percussing over the flannel waistcoat will sometimes detect an increased density of a lung when the mere fingers will not.

If we strike our thigh, and then our chest, we elicit two distinct sounds; the thigh-sound is dull, thick, and solid; the chest-sound clear and drum-like. As the lungs increase in their density, the drum-like and clear sound verges into the dull and solid sound. Every pulmonary sound is to be examined both absolutely and relatively; in fact, relative observation is our chief guide; therefore we test the two sides of the chest at symmetrical points, clavicle and clavicle, &c., and with the same power of percussion; otherwise we should elicit sounds from different depths, and consequently produce different impressions on the ear.

The two lungs may be equally and absolutely dull and yet not relatively dull in regard to each other; or one lung may be both absolutely dull and relatively dull. The relative dulness may be so slight, that we hesitate to give an opinion; but this very hesitation is a suspicious sign, because something makes us hesitate; in such cases, percussion is said to be obscure.

The chest should be percussed all over, generally beginning with the mammary or anterior region, and laterally where the thoracic walls are thinnest, (placing the patient's hands upon his head;) and then posteriorly over the scapular region and between the bones. The posterior region it is most difficult to percuss, the scapulæ and large muscles intervening between us and the lungs. The posterior region is very important to examine, because the greatest portion of lung lies here. The patient should fold his arms and make a round back during this last examination. The posterior sounds are more dull than the anterior and lateral sounds; in fact, the ear requires to be specifically educated for all the sounds elicited from the back. A man may be well skilled, in the sounds of anterior percussion and auscultation, but, if he has not studied the posterior region, he will, in examining this, be utterly lost, and his opinion useless, because the larger bronchi are nearer to his ear. We sometimes first detected pulmonary consumption on the back.

"Dulness" is a sign of consolidation or increased density of the lung, the degree of dulness being commensurate with the degree of density.

Non-symmetrical breathing is a sure sign of one lung being considerably different from the other, either in density or permeability to air; likewise limited symmetrical breathing movements are a sign of consolidation or diminished permeability of the lungs. Non-symmetrical breathing is *not* necessarily a sign of cavity, though it frequently attends it. A flattened chest generally is a sign of the lungs being increased in their density. Therefore, sound, movement, and form of the thoracic region become strong signs of the presence or absence of consumption.

The apices of the lungs are universally the most common seat of the deposition of tubercular matter, and, probably, the anterior thoracic region above and below the clavicles more so than the posterior region, and the left apex more common than the right apex.

Of the Respiratory Sounds.—Between the trachea and the air-cells the volume of respired air is broken up into thousands of minute streams, producing different sounds as it penetrates the substance of the lungs; therefore, there are tracheal sounds, rough and hollow; bronchial sounds, smaller, less hollow, whiffing, or tubular; and, lastly, vesicular sounds, a soft and silky murmur, like a breeze amongst rich foliage,—all producing impressions upon the ear, of different degrees, as large and small.

Vesicular Murmur.—The purity of vesicular murmur increases as we recede from the larger tubes; therefore, at the lateral and inferior parts of the chest it is most pure. It is the sound of *inspiration* only, and not of expiration, until we approach the larger tubes. At the trachea, the expiratory sound is equal to the inspiratory sound. ("Cyclo. of Anat. and Phys.," art. Thorax, p. 1086.) Sometimes the vesicular murmur is not to be heard even in a healthy subject; in children it is naturally most intense, and is termed "puerile respiration." When organic disease of the lungs commences, the respiratory sounds alter in volume and in character.

Conditions affecting Volume.—When we listen to the penetration of the breath into the lungs, either in ordinary or deep breathing, we first direct our attention to the question of the volume of air entering,—if deficient, or exaggerated, or feeble, or harsh; and if the expiration is audible, prolonged, and harsh. These are morbid effects; they are signs that the natural relation between the air-tubes and the volume of air is changed; either the tubes are diminished in calibre, or a larger volume of air than natural is forced through certain channels. This is the first stethoscopic sign of pulmonary obstruction. To elicit these points more clearly, we request the patient to "breathe deep;" sometimes patients (particularly females) purposely, or through nervousness, hold their breath, but the request to "breathe deep" clears up such a condition being taken as pulmonary obstruction. Indeed, nervous breathing in females is not uncommon, appearing as feeble and hesitating, yet it can readily be distinguished as such by the whole condition of the patient, and cannot well be confounded with the steady deficient breathing of a morbid lung.

If we have strong breathing, or bronchial breathing, where we should hear the soft murmur, we obtain an evidence of the deposition of solid matter, or of some better conductor of sound existing between the walls of the chest and the bronchial tube than the natural spongy texture of healthy lung. Bronchial breathing therefore becomes a morbid sign by transmission, and hence an indirect evidence of pulmonary disease. For the same reason, the transmission

of the heart's impulse beyond the region of that organ causes a suspicion to arise of pulmonary consolidation,—suspicion, we say, because in some nervous persons, under the excitement of examination, the heart beats violently. All these nervous conditions can be distinguished from organic derangement, because they lack many collateral symptoms of organic disease.

Cavernous Breathing.—This is a large sound, and gives the impression of a large space; whether rough, dry, or moist, &c., it is a direct symptom of organic disease, for it is not a healthy sound transmitted from a distance, but generated in, and caused by a cavern or excavation in the pulmonary tissue,—it is an exaggerated bronchial breathing. Although cavernous respiration is a large, rough, hollow, sound, yet it is frequently excessively difficult to distinguish cavernous from bronchial breathing. Many clever men have been wofully mistaken by committing themselves upon the question of a cavity, because a large bronchial tube transmitting its sound, and a small cavity producing its characteristic sound, may give to the ear the same impression, until the cavity exceeds in dimensions any bronchial tube, when the true cavernous respiration, with other humid or metallic sounds, come in to confirm our diagnosis. The question of cavernous or bronchial respiration is, probably more interesting than important, because the treatment is similar in all probability which ever sound is present, whether indicating a solid or hollow lung.

In health, expiration is always longer than inspiration, except in the act of yawning, when it is the contrary; but expiration, where the pure vesicular murmur is, should not be heard; when it is so, we generally find it harsh and rough, and generally prolonged. This is indicative of some obstruction to the escaping air, and therefore a morbind sound.

As a *resumé* to what we have just noticed, we first listen to the inspiration, if difficult, strong, feeble, harsh, quick or slow, bronchial or cavernous; next, if the expiration is unnaturally prolonged and harsh, all of which are signs of increased density or disorganisation of the lung.

Conditions depending upon Morbid Secretions.—The phthisical lung produces other sounds, not connected with the idea of volume, but which give the impression of an excess of moisture or of dryness in the air-tubes, and producing, respectively, the dry and moist sounds. These, in all their modifications, large or small, are direct evidences of some unnatural condition of the lungs,—they are not healthy sounds, transmitted from some remote distance, as, for instance, when bronchial respiration is heard instead of the vesicular murmur.

Dry Sounds.—When the air-tubes are preternaturally dry, the breath, as it passes into the depth of the lungs, causes a hissing, or wheezing, or whistling, all being small sounds produced by the smaller air tubes, and termed "sibilus;" but when we hear a larger sound, snoring or droning hum, or a sound like the cooing of a pigeon, this is from larger tubes, and termed "rhonchus." Therefore rhonchus and sibilus are the same class of sounds, but produced in differently sized tubes. They are both indicative of diminished tubes. Rhonchus is of less importance than sibilus, because in the latter the inflammatory or morbid action is nearer the air cells. As rhonchus is a bronchial sound, it may become a cavernous sound in a dry cavity or in a moist cavity, causing a hollow snoring, or snoring with gurgling. Rhonchus and sibilus are not specific signs of consumption, but of catarrh or bronchitis, extending more or less downwards into the lungs.

Dry Crackle.—This sound does not give the impression of bubbles bursting; it is a small sound, resembling the crumpling up in the palm of the hand of thin whited-brown paper; it is heard during inspiration. This is sometimes a difficult sound to distinguish, because it glides into the sound which we shall next notice, and, moreover, it is oftentimes mingled with, and considerably masked by, a rough and harsh respiration.

Moist Sounds.—*Humid Crackle.*—This is evidently an advanced condition of the dry crackle,—it gives the impression of the bursting of a viscid bubble, and strongly resembles the liquid "click" heard when a meerschaum pipe is nearly smoked out. We may only hear the humid crackle as a click once, or twice, or innumerable times in one respiration; or we may listen for many respirations and only hear it once: in this case we request the patient to cough, which will sometimes cause it to be heard. One evidence of this fatal "click" is most serious for the patient, and distressing for the friends. The dry and moist sounds not only glide into each other, but they often both exist at the same time, because some tubercles may be crude, while others are in a softened state, thus frequently masking each other. These sounds require more education of the ear to discriminate than any of the other stethoscopic sounds.

The pathology of these two last sounds has not yet been satisfactorily explained. There is no donbt but that the dry crackle is the incipient stage of the humid crackle, and that the humid crackle ultimately can become a cavernous gurgle, therefore little doubt remains but that both of these sounds are significant of tubercles, and it is sure that they only appear in the last stage of consumption, and are signs of serious disorganisation of the lungs. Although we observe these should be verified, yet, we believe, according to present opinions, that the dry crackle is a sign of crude tubercle, and the humid crackle that of softened tubercle, and as such we venture to explain their pathology, and at present to receive it as such.

Crepitation.—This is a very characteristic sound, quite distinct from the dry and humid crackle, except in very large crepitation, which may be a cavernous gurgle. It gives the impression of the bursting of bubbles of different magnitude, according to the dimensions of the tubes in which they exist; thus in the bronchi we have large crepitation, and in the finer tubes fine crepitation. Fine crepitation has been likened to the sound produced by the rubbing of a lock of one's hair (just above the ear) between the finger and thumb, or to the bursting of small bubbles in a glass of "fresh ale," or, again, to the little explosions of fine salt when thrown upon hot coal.

Crepitation is indicative of inflammation when in the larger tubes, that of bronchitis; and when in the finer tubes, that of pneumonia.

If Laennec had never done more for the science of medicine than to discover this simple sound and the pathology thereof, Laennec erected for himself a monument as durable as did Harvey in the "circulation," or Jenner by "vaccination." Few such monuments ornament the dreary plain of medicine.

Of the Voice.—In health, the sound of the voice, as it penetrates downwards into the substance of the lungs, gradually dies away, giving different impressions to the ear according to the dimensions of the air-tubes. With the stethoscope upon the trachea the voice is distinctly heard, as if it came out of the end of that instrument,—over a bronchial tube it is in a less degree clear, and less distinct, and over the general surface of the lungs, where we have vesicular breathing, it is entirely lost, so that at the lateral and inferior part of the healthy lungs it cannot be heard, except below the acromial extremity of the right clavicle, where a feeble vocal resonance may commonly be recognised; but, on the corresponding locality on the left side, it is not present.

If that vocal sound proper to the trachea be heard below the clavicles, it is termed "*pectoriloquy;*" and if the characteristic vocal sound from the bronchi be distinguished where the vesicular murmur is common, it is denominated "*bronchophony;*" therefore, these sounds, though healthy in certain distant parts of the lungs, become, when transmitted to where they ought not to be, morbid signs, and an evidence of consolidation or of a cavity in the lungs; hence, bronchophony is an indirect evidence of dense lung and pectoriloquy of a cavity. All these sounds run into each other, strong resonance is weak bronchophony, and strong bronchophony is weak pectoriloquy; consequently, at the transition point, as between bronchophony and pectoriloquy, there is much difficulty in giving an opinion, and we thus become cautious by experience. Bronchophony and vocal resonance, we have observed, are indirect evidence of something more solid than healthy lung existing between a bronchial tube and the walls of the thorax; but pectoriloquy is generally a direct evidence of cavity in the lungs, because the cavity generates this sound. We have said pectoriloquy is *generally* an evidence of cavity, because a very dense state of lung will convey the tracheal sound of pectoriloquy without a cavity; and, moreover, we may have a cavity without pectoriloquy, by reason of some physical obstruction in the leading air-tube to the cavity, although we may still have cavernous breathing. Cavernous breathing and pectoriloquy, though most commonly associated, yet are not necessarily so. Pectoriloquy is, therefore, an equivocal sign of cavity; and, in fact, we may say, all the vocal sounds are generally more equivocal than the respiratory sounds.

Our knowledge of these vocal sounds on the anterior thoracic region, must not be taken as a guide over the posterior thoracic region, particularly between the scapulæ, which locality is immediately over the large bronchial tubes, and therefore we expect to find the vocal sounds stronger in this region. Experience must teach us the difference,—this remark is applicable to all the morbid lung sounds. Vocal resonance, if ever so slightly heard below the left acromial clavicular extremity, is a sign of increased density or some morbid condition of that lung; but not so, if slightly heard at the same point on the right side.

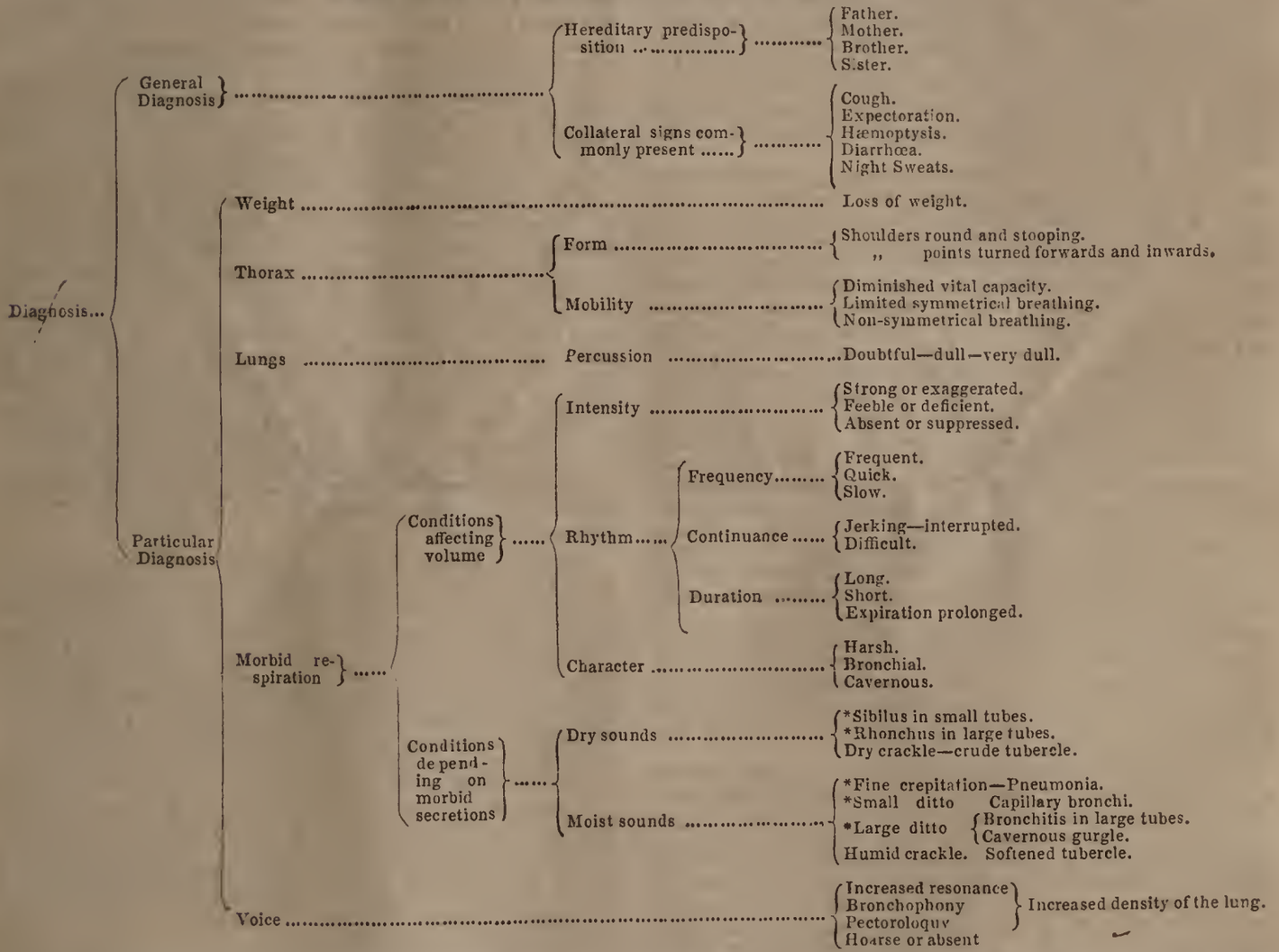
The morbid vocal sounds may be very circumscribed or diffused, according to the extent and degree of the increased density of the lungs.

This brief sketch is the result of experience; and we have enumerated the chief points necessary to detect pulmonary consumption as cognisable by the ear, the eye, and the hand. In coming to this we obtain a glimmer of other points more rare and obscure, but the introduction of these would not suit a sketch like the present.

We may add that these signs, together with the general history and symptoms of the case as hereditary predisposition, (out of 1010 cases, male and female, 24·4 per cent. were born of consumptive parents,) and the presence of those signs which are variable in their continuance and severity, and uncertain in their return—as cough, expectoration, hæmoptysis, diarrhœa, night sweats, and hectic fever,—together with the loss of weight, change of thoracic form and movement, and alteration of voice, are true signs of the presence of pulmonary consumption.

Hæmoptysis is a very common symptom. (See Art. IV.) In the following table we arrange all these symptoms in order, and in so doing we have to acknowledge the able assistance and kindness of your colleague, Dr. Cursham, in classifying that portion under morbid respiration.

SYMPTOMS OF PULMONARY CONSUMPTION.



The chief points to be recollected in listening to the respiration are, is the breathing deficient, harsh, bronchial, or cavernous, is there dry or humid crackle and is the expiration audible; lastly, is the voice resonant. With the other points we become acquainted by degrees.

OF THE TREATMENT—(TO BE CONTINUED.)

Milton-street, Dorset-square, August, 1850.

* These symptoms, though not necessarily present nor connected with pulmonary consumption, are oftentimes associated with it, and this is the reason for introducing them here.

DESULTORY SKETCHES.

By J. STEVENSON BUSHNAN, M.D.

(Continued from Vol. XXI., page 415.)

MEDICINE AN IMPERFECT SCIENCE.

The science of medicine, though cultivated from the earliest times, and prosecuted by some of the brightest minds that have applied the force of their genius to unravel the "deep profound" of the mysteries of organisation, has not shone forth with that steady, undeviating light of advancing progress, which other arts and sciences would seem especially to enjoy. Let us inquire whether medicine *alone*, among the sciences, merits the opprobrium of doubt and uncertainty which has so frequently and so lavishingly been bestowed upon it.

A candid and dispassionate estimate of the condition of the physical sciences at the opening of the present century, contrasted with their now apparent palmy state, were in itself sufficient evidence to prove the loose and wretchedly

imperfect condition they were in, so recently as fifty years ago. It would be impossible to err in taking any one of these to demonstrate the truth of my proposition; I will select, however, the science of geology, as an illustration in point, at once emphatic and impressive. Reposing on a few scattered facts, rudely expressed, and imperfectly understood, the whole science of cosmogony, towards the close of the latter century and the opening of the present, seemed to be nicely balanced between the abettors of the Huttonian doctrine and those who espoused the Neptunian theory. By the one sect, the solvent property of water seemed to have ruled the mode of the formation of the habitable globe; while the other as strenuously adhered to the all-energetic agency of fire. Witness how these dreamy problems, apparently based on accredited facts, have all dissolved, "like the baseless fabric of a vision," before the gradual development of unquestioned truths, and the simple observation of the exposition of sections of the crust of the earth,—the myriads of primæval remains, both of animals and of plants,—and the uncontested evidences of many fair surfaces of lands and waters having successively, in prior epochas, constituted the *then* habitable globe, out of whose wrecks the present world exists. So complex, indeed, is the whole fabric of our earth, that he who would read it aright, must bring to his aid the appliances of every art and science taught in the wide range of human knowledge; and, withal, he will have but an imperfect conception of the philosophy of the creation.

The parallel between medicine and geology is much closer than might at first sight appear; yet I would not insist upon it further than to show, that, as imperfections attend the highest efforts of the human mind, and the most laborious investigations into subjects which might seem capable of an easy solution, we must not feel disappointed where similar difficulties arise in the prosecution of studies which involve the difficult and abstruse questions of life and organisation, and the no less intricate mazes of pathological aberrations. It would be easy to multiply illustrations. What is the science of political economy—the science of the consolidation of states,—the adjustment of demand and supply,—but an endless and interminable succession of labyrinths, moulded by the political quack, as a panacea for the manifold ills that so densely beset our social conditions? What is the law which proclaims itself as the legitimate exponent of truth, and which is known everywhere by the glorious uncertainties of its awards and conclusions, while its practical working is typified, among all classes, by the fable of the oyster and its shells? Enough. If medicine be uncertain, it is only so in common with all other sciences; and as their imperfect condition is but a type of the general imperfection or incompleteness which marks everything that is human, I am disposed to believe that, *relatively*, it does not fall behind other arts in the precision of its facts, or in the general soundness and validity of its principles.

Viewing the rapid changes of society since the opening of the present century, especially as affects the subjugation of the elements to the controlling influence of man, it might be deemed no less presumptuous than positively unphilosophical, to pronounce *à priori* on the probable range or limitation to the progress of the art of cure, or to affirm, that the purest Utopia on earth,—a frame without disease,—might not be maintained, if not positively secured, to the whole members of the human family—the euthanasia of death, after a seventy years' pilgrimage, becoming the natural lot of all men. What would have been thought of the man, thirty, twenty, nay, only ten years ago, who would have been so hardy as to assert, that the time would soon come, when the most racking operation that the surgeon has to perform for the relief of suffering humanity, would be effected without producing the least pain to the patient—sufferer then he could not be called—and that even the placid smile of content, or the illusive reverie of pleasure, would light up his countenance, while the swift iron performed its unconscious task?—a dream suited to the phantasies of the *Utopian* never in the nature of things to be realised or to be witnessed under our present earthly state and physical formation. But the whole world now rings with this truth, and the most dreadful operation that the most cruel accident can necessitate is now performed when the system is under the influence of the most powerful anæsthetic.

If by the science of medicine we are to understand a profession or art, which shall cure every ache the human body can experience, or every pang the mind may endure, we at once acknowledge the inefficiency of the art and the inability of its professors. But, on the other hand, if we can define the limits of the action of the instruments it wields—if we can approximate, with a reasonable assurance of certainty, the results of the diseased action going on in the human body, whether to terminate in recovery or finally cease in death—if we can definitively point out the causes of these deranged conditions of the animal frame—and, finally, if we can, by a proper system of hygienic arrangements, and other available measures, give unquestioned testimony to the truth of these causes, by witnessing the total absence of the diseases under a proper scientific system of prophylaxis, the assent of the thinking portion of mankind will not be withheld, that, as a science, medicine not only maintains its grounds amongst the other departments of general knowledge, but that it has attained a degree of completeness, of fullness—perfection we had almost said—which *à priori* could scarcely have been predicated. This I judge to be the result of the unflinching adhesion to the Baconian principles of philosophy manifested by its professors throughout the wide range of the world; and that amid the distracting contrariety of evidences which the causes of disease so abundantly supply, and the almost Protean character of their symptoms.

That medicine ever can become a perfect science, in the most strict interpretation of the term, might easily be demonstrated to be a physical impossibility. We might show it by the elementary organisation of the mortal frame of man, and that fixed fiat which went forth on his creation, "Dust thou art, and unto dust thou shalt return." The created mortal carries within him the seeds of his own dissolution, sooner or later to be called into action, either through the agency of numberless causes applied from without, or through the inherent viciousness of internal organization. He that would endeavour to fight with these must happily be prepared to fight against the order of nature, and yield the palm of victory to the omnipotence of fate. But there is a certain charmed ring, within which the spell of the physician may be, and oft times is, happily exercised; and which, discreetly used, demonstrates the efficiency of science against the inroads of irregularities,—of constitutional errors and vitiations,—but falls powerless as the paralysed limb itself if it essay to stay the determined march of the numbered hour that is on the wing to lay its victim in the dust.

Disease is then itself a part of *nature*,—a mode devised to facilitate oft, and even favourably, too, our separation from scenes which no longer can afford joy, and only prolong the bitterness of the cup of life. In this point of view the chamber of the sick becomes a great physical and moral lesson; and the certainty of that which cannot be escaped—the common doom—elevates the hopes to that other and better sphere of existence where time is not known. Unavoidable, therefore, as disease is, and certain also as death is to all, there has, nevertheless, been a progress forwards in the successful application of the healing art,—the result of time and undoubted experience,—not always, I lament to say, the fruits of the discoveries of the physiologist or the researches of the pathologist. I might cite more than one proud illustration of this; but none seems more bold and fitting than the change of the treatment of the insane, and its result, prior and subsequent to the era of Pinel. On this affection it has been said,—

> "This of all maladies that man infest,
> Claims most compassion, and receives the least."

Can any language, indeed, be conceived adequate to represent the physical and mental sufferings of the human being, chained by iron rivets to the ground in his dark subterranean cell; his reason a blank,—within all memory gone,—without all humanity forgot. And now mark the contrast, since the enlightened Pinel struck the fetters from the maniac's limbs, and shed the health-restoring rays of his benevolent spirit over that desolation that has been so truly deemed more appalling than the tomb. Here has been ground for congratulation,—here has been achieved a triumph compared with which all others vanish as the *ignis fatuus* of the marsh, when put in relation with the moral grandeur of the restoration of the lost intellect to its wonted seat. If he was not the Prometheus that stole the fire from heaven to animate the fictile clay; the glory of that deed,—the restoration of that without which man is even inferior to the lowest form of organic existence,—a being without an object,—an organ-

isation without a purport,—a melancholy abortion of the creation,—is scarcely second to it.

With such a bright example before us of what the healing art may and can do, it would be foolish to despond of further ameliorations in the treatment of diseases. Influenced by it I see no ground for despair; actuated by it, I see every reason to hope for a brighter era in our profession. If we cannot discover anything new, at least we can extend and enlarge the field which has been so successfully cultivated, and which offers no mean reward to those who engage in the truly philanthropic and soul-inspiring task.

7, Nottingham-place, Regent's-park.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

VARICOSE ULCER.

Continuing our account of the most practical cases in this hospital, I am tempted to select a somewhat new and satisfactory mode of treating varicose ulcers of the lower extremities, several cases of which very troublesome affection have been lately under treatment.

The healing of an ulcer on the lower extremity, though apparently simple, is one of those difficult problems that so often test the patience as well as exercise the skill of the surgeon. The causes of ulcers, it need scarcely be said, are very numerous, and going through our hospitals it is quite amazing the variety of troublesome and ill-conditioned ulcers that present themselves; among these, the varicose ulcer of the leg holds a very prominent position; to prevent this condition of the veins of the lower extremity is of course the chief point to be arrived at, and for which many plans have been suggested. The causes of ulcers are generally either constitutional or local; the former, of course, including all those changes in assimilation and digestion so much dwelt upon of late years, and so much affecting the general health—scrofula, gout, scurvy, dropsy, &c., the merely external or local causes, everything that interferes with the integrity of the surface of the skin. Again, we have the familiar arrangement of ulcers that are specific, irritable, phagedænic, indolent; amongst the last mentioned of which we may put the ulcer under consideration.

Case 1.—Henry Cooper, aged 36, came into hospital July 26. He has been seven weeks ill with an old sore leg, all the side of the ankle is one large ulcer from varicose veins. As usual in this disease, the ulcer is situated near the ankle, on the inside of the leg; there is the brown dusky discoloration of the integuments, the edges of the sore indurated, callous, and raised; as usual, also, he complains of pain and soreness.

Having undergone much of the usual preliminary treatment before coming into hospital, in addition to purgative medicines having had ointments and lotions, &c., it was thought advisable to check if possible the varicose condition of the vessels. The old plan of taking up the vein and tying it, always leading to phlebitis, was thought not advisable. A caustic issue along the chief vein, between the ulcer and the heart, a plan tried with the best results previously in this hospital, was adopted, and has proved most satisfactory. It has quite astonished the poor man himself, who hopes to get back in a few days to his employment. The potassa fusa has of course produced a large eschar, to which he has applied a poultice. The ulcer is carefully strapped and bandaged, as well described by Mr. Chapman, and rest with the horizontal position enjoined.

August 4.—The man seems quite rejoiced at the sudden improvement in his health and the healing up of his old ulcer. The issue is not so troublesome to-day as it has been; poultice to be continued to it; plaster and strapping to be renewed.

6th.—Ulcer visibly healing; the issue a little sore. His general health and strength have undergone the most marked improvement. The most remarkable point, however, in the case is the quickness with which healthy granulations in the old ulcer have sprung up.

Case 2.—Jeremiah Crawley, aged 40, admitted July 10, is the counterpart of the foregoing case, he has been laid up with a bad leg for seven months, during which he has been able to work very little, but has at last decided on coming into hospital. He has large varicose veins, and the usual indolent ulceration near the ankle, on the inside of the leg, with large indurated callous edges. His general health seems excellent.

He was ordered the usual house medicine, to have the leg carefully strapped and bandaged, and the *potassa fusa* rubbed along over the site of the larger vein near the inside of the knee; to give the limb as much rest as possible. This man, too, has been going on most favourably; the ulcer is just healed up, and the varicose condition of the veins is quite removed. He goes out in a few days.

The *modus operandi* of the caustic in these cases is, perhaps, open to a little speculation. Mr. Green seems to think it destroys the superficial varicose veins by interrupting the current of blood in them, and forcing it into the deeper veins. If we succeed in checking this varicose condition of the vessels under the skin, the healing of the ulcer follows as a matter of consequence; we have possibly the counter-irritant effect of the caustic also. The great practical fact, however, for our notice is, that it is the best mode yet tried, and the safest, perhaps, for healing those very troublesome and very unsatisfactory ulcers. It is less dangerous than any of the plans recommended for interfering directly with the vein, and I am not quite sure but it is simpler, and more grateful to the patient.

Taking up the saphena vein was one time tried in these cases, but is now very properly discontinued. The cutting out of a piece of the vessel seems not less formidable, and is equally dangerous. The subcutaneous incision of the vein, as practised by Sir B. Brodie, has been tried also; but his own very clear account of his cases would not lead us to put much faith in the operation. Then we have *puncture* of the vein, of which little can be said that is favourable,—*cutting* the vein, piercing it with needles, &c. The most simple practice, and certainly that liable to injure the constitution the least, is the use of the caustic potash. Of course, before having recourse even to this, it would be advisable to give a fair trial to the simple use of a well-applied bandage, with water dressings or the adhesive straps, according to the exact condition of the ulcer. If evidently inflamed, as the ulcers mostly are when first seen, the patient should be kept in bed, fomentations, and perhaps leeches, tried. When the inflammation is got under, the ulcer is to be covered with a little soft charpie; the varicose condition counteracted, as much as possible, by a skilfully applied bandage, affording equable support from the toes to the knee. Sticking-plaster, in single straps, (like an ordinary Scultetus's bandage,) or after the plan of Mr. Chapman, is, perhaps, preferable to the classical spirals of Baynton's method. Great care is necessary in the application of the bandages and straps, as well as that of the laced stocking; the latter should be such as not to retain heat too much,—some light fabric, calico, stocking-web, or nankeen being the best. The caustic potash, I need scarcely say, was originally suggested by Bonnet, and in this country first tried, perhaps, by Mayo. The chief objection against it is that, more than once urged, that the slough takes a long time to separate; and when one cluster of veins is lessened in size another cluster appears. The mere fact of its being almost exclusively used in this and other hospitals would lead us, however, to doubt if there is much practical force in the objection. The introduction of a thread through the vein to produce a clot has been suggested where the caustic has failed. A good plan, also, is to thrust a pin under the large vein and raise it, a second pin being thrust through it crosswise, a thread of silk twisted round both externally. This obviously will produce a clot, and should be had recourse to after the simpler means we have alluded to have failed. Some ordinary phlegmonous inflammation will follow, with swelling of the inguinal glands, not of very great moment if watched. In old people any operation of veins is dangerous. In young patients with bad varicose ulcers, after the caustic has failed, the pins are worthy of a trial, and should at least precede the more formidable and more dangerous operation—that of tying the vein. Every practical surgeon must at once recognise the difficulty of giving any general rules; some patients not bearing the slightest puncture or cut, and others as commonly escaping after the most formidable operations. In all we have, however, a safe resource in the potassa fusa, as we have just described.

COMPLETE LOSS OF EAR FROM A BURN.

Mary Spenser, aged 25—a very singular case—is now in St. Thomas's; she has come in to see what can be done for her. Two years ago, it seems, in a severe fit, she fell into the fire. All the side of her face and head was burned, and she lost every trace of her left ear. At present, she exhibits a most remarkable appearance—quite a pathological study. The hair-bulbs, and ordinary scalp of the left side of her head have been destroyed; the old cicatrising process, under which she suffered so much, seems not yet entirely finished. The left half of her head is bald; a large piece of conjunctiva is everted, and turned up over the temporal muscle, leaving the eye very much exposed, with an ulcer already forming; and the ear is completely gone. The other half of the face and head renders the incongruity, perhaps, still more unnatural by their perfectly unchanged aspect. The curious point in the case seems to be, though there is no trace of external ear whatever, and the membrana tympani itself must have been burned, that *she hears quite well* with that side of her head. The ordinary meatus in the hard structure of the bone at this point seems to have suffered little, and the canal itself is little altered; but as far as concha and tragus are concerned, which M. Savart leads us to think are so essential to the condensing and conducting of sonorous vibrations to the internal ear, there does not seem the least trace of those parts. She seems quite cheerful, and suffers little but from this horrid deformity. She cannot see, on account of a little minikin ulcer on the eye, but can hear, though her entire ear is gone.

MIDDLESEX HOSPITAL.

LITHOTOMY.

By JOHN L. MILTON, Esq., M.R.C.S., Lond.

In the following case the rise and steady progress of the disease up to its termination by operation, form, as it were, but one continuous and uninterrupted history. The inefficiency of lithotrity in a case where all seemed favourable for its performance, and the severity of the symptoms from so small a calculus, are not without interest. The mere operation for the extraction of stone would be, in London, where so many great operations are performed every week, a thing of minor importance, were it not that every case has its difficulties and its advantages, its interesting features and instructive points, and that in a disease where, up to a certain period of development, opinions are so nicely balanced between lithotomy and lithotrity, everything that can tend to establish our line of treatment is of value. It is for these reasons that we submit to our readers the following particulars:—

The patient, a stout built man, of sanguine temperament, but who presented indubitable marks of having lately lost much flesh, was a coachman, aged 53, who had, up to a late period, always enjoyed very good health. The first symptoms of which he has any recollection, attacked him about seven months ago, when he was down with his master in the country. He observed, on lying down at night, that so soon as he began to get warm a pain of a violent darting kind traversed the penis from the root to the end of the glans two or three times in succession; it was so severe, that if it attacked him when dozing off to sleep, he instantly woke with a start. He thought he had gravel; and this being, in the opinion of persons of his class, a common complaint, he took no medicine for it. In about a month he returned to town with his master; and soon after remarked, that whenever he made water a pain darted up the groin to the left side, and that this generally happened just as the last portion of urine was passing off: this pain steadily increased, till at last he used to shout with the agony every time he micturated. He still paid no attention to it; living as usual, taking meat twice a day, with two or three pints of porter daily, and occasionally a little spirit; but at last, seeing no probability of its leaving him, he went to a surgeon, who confirmed his suspicions that he had got gravel. He was now bled, with immediate relief to the pain in his side, but darting pains still continued in the penis; he was also put upon liquor potassæ, under the use of which the symptoms got worse. And now the presence of a stone began to be clearly announced; for frequently when he was making water it suddenly stopped, —so suddenly many times that he likened it to the stopping of a stream of water by turning a plug; and about an inch from the end of the penis he had a sensation as if the canal were plugged up, while he was tormented by an unconquerable desire to force the urine through this obstacle. Sometimes, after repeated and irresistible efforts to accomplish this, several drops of pure blood would flow from the urethra without producing any relief, for the sensation almost immediately returned; and at last he felt as if he could make water all day long, notwithstanding the suffering which attended every attempt to do so. So strong was this impulse, that, when attacked by it in the street, he was obliged to seize the nearest thing, and hold by it till the paroxysm passed off. During all this time he had no pain about the neck of the bladder.

Sometimes he got a night's rest. Thus, if he lay down on the right side, and remained quiet, he would fall off to sleep, and awake refreshed and better; but, at other times, when restless, the night was attended with little less suffering than the day.

Finding no relief from the prescriptions of the gentleman he was under, he went to another practitioner, who told him he had certainly got stricture, and gave him pills and a mixture, which purged him very much, to prepare him for the catheter being passed! Next morning the patient went to this surgeon, who passed a catheter, left it in the bladder for twenty minutes, and gave him a bottle of medicine similar to that which he had previously taken (liquor potassæ). The catheter was passed every morning for twenty to twenty-five days, with the effect of overcoming the spasm of the urethra, for he could make water with less pain after using it, except when it made the urethra sore, and occasioned scalding. The surgeon always found great difficulty in getting the instrument through the neck of the bladder, but the patient most certainly does not seem to have had any stricture, as he distinctly says *he never noticed any narrowing of the stream*, but that, on the contrary, he made water in quite a full stream, and, when sounded in the hospital, *no stricture at all could be found.* He now gave up attendance on this surgeon, and, finding that he grew no better, and that he had lost about three stones in weight, he came to the hospital, and was admitted under Mr. Mitchell Henry, who was at that time officiating for Mr. De Morgan

As soon as Mr. Henry learned from him the particulars of his case, he came to the conclusion that his symptoms were those of stone, and, having sounded him, detected a small calculus. The passing of the sound was immediately followed by a rigor. Seeing that the stone was so small, Mr. Henry was was anxious to crush it, and with this view injected the bladder; but this part of the operation immediately brought on such a fit of shivering, that it was at once resolved to substitute lithotomy: this was accordingly done on the 9th of July; but, on dividing the prostate, it was found to be of such size, that it was with great difficulty the stone could be reached. It was detected lying behind the prostate and bearing upon the rectum; but, after a fair trial, it was found impossible to grasp it with the forceps, so that it was only by means of the finger introduced into the rectum and the scoop that the surgeon could extract it.

The operation was followed by considerable hæmorrhage, one large vessel, probably the deep transverse perineal, of unusual size, required two ligatures, and another vessel of smaller calibre bled freely until secured by ligature. Bleeding of this kind demands the greatest attention, for it may be the artery of the bulb which has been divided, an accident which has proved fatal in very experienced hands, and is certainly one of the most formidable complications in operating for lithotomy. It would be impossible to enter here fully into this subject, as it is rather a complicated point; but, if our readers will turn to a paper by Mr. Holmes Coote, in the *Medical Times* for the 10th of August of this year, they will see it adverted to. Mr. Coote has there related some interesting particulars respecting the abnormal position of the artery of the bulb. A wound of this artery, almost as dangerous as division of the internal pudic itself, may, it appears, easily occur, even when the precaution is taken of only dividing a few fibres of the base of the triangular ligament, and, in some cases, no skill could guard against it.

Since the operation there has been no unfavourable symptom. As is common after the first few days, the urine passed principally by the penis, owing to the swelling of the wounded parts; as this subsided it again flowed through the wound, and again, on this healing, by the penis. At the present date (Aug. 25th), the wound has all but healed, the

ligatures having soon come away, so that the case may be considered as ended. For several days after the operation the urine was very acid, and caused considerable smarting, which was, however, relieved by small doses of bicarbonate of potass. The stone was oval, of friable texture, and very small, only weighing 43 grs. Mr. Taylor, whose analysis of the calculi in the museum of the College of Surgeons is well known, examined this stone, and found it to be composed of "uric acid coated by a thin layer of urate of ammonia, with oxalate and urate of lime."

It would be interesting to trace the reason of calculus appearing just at this period in this man, exposed, apparently, to exactly the same hygienic and atmospheric influences for more than a quarter of a century. For upwards of thirty years he has been married, living the same routine, following the same occupation, eating and drinking well all the time, seldom knowing want, and not indulging in any excesses. He has not had the gonorrhœa since he was a lad, and has on the whole enjoyed good health. We have not space here to enter upon any examination of the conflicting theories respecting the production of stone held by Wetzlar, Magendie, Von Walther, Willis, &c., but it would certainly appear, that rich living determines to the production of lithic acid, and the use of certain waters to the production of lime. That in the upper classes, among whom coachmen may physiologically be ranked, the great majority of cases of stone occur in persons upwards of fifty years of age; that seamen, owing to their greater consumption of muriate of soda, and lesser consumption of fermented liquors, enjoy a great immunity from stone; and thus, in the present case, the gradual decay of the frame attendant upon advancing age, may have been the predisposing cause, and the use for a long period of time of fermented liquors and good living, the exciting; the latter having remained inoperative till the former came into play. Had he retained his pristine vigour, he might have been cut off by some other disease, and have gone to the grave without ever having a symptom of stone.

We have most particularly to request that all communications for the editorial department of this Journal be simply addressed

"To the Editor of the Medical Times,
46, Princes-street, Soho;"

and more particularly at this season, when "London is out of town." If this regulation be not attended to, it is probable that important papers may come to hand too late for insertion.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 7.

DR. GREENHILL'S MORTALITY RETURNS FOR OXFORD.

There is no one of the departments of public business that has given more satisfaction in its working than that instituted for the Registration of Births, Marriages, and Deaths. The urbanity, accessibility, skill, and laborious industry of those who direct its operations are too well-known to need illustration or commendation on our part. The results are before the public; and, although we are of opinion that the mechanism by means of which the facts are accumulated is susceptible of improvement, yet, taking the documents as they are, they form collections of data such as no other country possesses, and are destined to yield solutions to many problems, even after Mr. Farr has concluded his quarterly and annual operations upon them, fertile as these have proved in enunciating weighty truths, and indicating important duties. As a pregnant illustration of their more immediate benefit, we may refer to the weekly publication of the exact cholera returns for the metropolis during the late frightful devastation. While in some of the capitals of Europe these were carefully withheld from the public, with the natural effect of adding exaggerated panic to unavoidable horrors, here they were all courageously, punctually, and laboriously set forth, not only as respects mere numbers, but also in regard to locality, supposed cause, and all ascertainable particulars. By this praiseworthy procedure, involving immense additional labour, the truth was told distinctly, accurately, and opportunely, and the consequence was, that public attention became riveted on certain localities and abominations; and, if we are about to realise any important sanitary improvements, this will not so much result from the conviction of their necessity entertained by sanitary reformers, and long since urged by them on a heedless public, as from the terrible exactitude with which their predictions have been proved by these returns to have become realised.

Our object is not, however, to write an eulogium upon the Registrar-General's Office, but to indicate the propriety of giving a still greater extension to its beneficial operations. That this has not been already effected, is sad evidence of the exceeding slowness with which the most obvious improvements are sometimes propagated. It seems almost incredible, that while England has for a series of years derived such acknowledged advantages from its system of Registration, Ireland and Scotland yet remain destitute of any participation in these. The prejudices of the lower classes (so strongly manifested at the last census), and the difficulty of organising there a body of officials to undertake the primary registration, may at least offer some semblance of excuse as regards the former country; but that the inhabitants of Scotland, so famed for their shrewd common sense, and for their ready adoption of obvious improvements, should not only not have demanded, but absolutely have opposed, the introduction of the system, passes our comprehension.

However, restricting our attention at present to England, we are of opinion that the Registrar's Mortality Returns might be made much more available for purposes of local utility than they now are. For the metropolis, these are issued weekly with great regularity, and are forwarded to all persons who, by application for them, manifest sufficient interest in the subjects they relate to; but for the provincial towns no periodical returns are published except those contained in the quarterly and annual Reports. To publish these at short intervals, and *in extenso*, for the various provincial towns and districts, would be a work of greater magnitude than the general public interest attaching to them would warrant the authorities of the Registrar-General's Office undertaking; but that they would facilitate the preparation and publication of such by municipal or other authorities, locally and directly concerned, we have no doubt. Indeed, our attention has been drawn to the subject by the fact that they have accorded such facilities to Dr. Greenhill, who, with the assistance of the Ashmolean Society, commenced some time since, and has carried on regularly, a monthly report of the mortality of Oxford. That a city with which we are not accustomed to associate ideas of progress, and that by the hand of one of her most learned inhabitants, should have set an example of such practical utility, is, indeed, remarkable and gratifying. Dr. Greenhill is already well known to the profession as the author of the best edition we possess of Sydenham's works, and of a translation of Rhazes from the Arabic, as also of some attempts at improving our ethical professional relations; and we warmly

welcome him into the new field upon which he has entered. We trust that his example will be speedily followed; for, great as is the utility of the publication of returns of this description for London, from the vastness of its size, they are far less susceptible of minute examination and application than would be those for more limited districts, where complete familiarity with the localities, and acquaintance with the existence of accidental and contravening circumstances, would enable the greatest amount of usefulness, with the least alloy of error, to be extracted from them. Dr. Greenhill accompanies the Returns with abstracts from a Meteorological Register, and comparisons with the averages of other years; and we think he would add still more to their value, if he, from time to time, furnished some account of the prevailing diseases, (which have various, curious, and interesting relations, irrespective of the mere amount of mortality,) as also of the medical topography of Oxford, its supply of water, the state of its sewerage, and the various facts of this kind, which would enable persons at a distance to derive benefit from his labours, as well as those for whose use they are more immediately incurred; and which they would be far more able to do if assisted by a plan or skeleton map.

It is true, in all towns a body like the Ashmolean Society does not exist willing to undertake the publication of similar returns; but we are disposed to believe, that when the local newspaper press had set forth the utility of such an undertaking, that either municipal authorities or voluntary subscriptions would soon provide for so moderate an expenditure for a procedure which, even in its preventive operation, would soon more than repay its cost. That members of our own profession will, if thus aided, eagerly follow Dr. Greenhill's example, we feel persuaded, and we hope that a sufficient degree of zeal has been generated by recent sanitary discussions, to obtain for them the co-operation of those who will be much greater gainers than themselves by whatever is effected. We hope to find, at some not very distant period, the Registrar-General's department brought into intimate and official connexion with future sanitary arrangements, feeling certain, that those engaged in examining into the causes, and ascertaining the amount of existing mortality, are best able to devise and carry out measures for its diminution.

NEWSPAPER PHYSIC.

Ne sutor ultra crepidam. It is not, then, our province to teach the Editor of the *British Banner* theology. The Editor of the *Banner*, less satisfied, we suppose, of the truth of the adage, has beguiled himself with the pleasant fancy that he can teach physicians physic. Alas for his reputation, he has printed his dream!

"They," the physician and the divine, "differ *but* in object,—the one of the body, the other of the soul, and use divers medicines to cure; one amends *animam per corpus*, the other *corpus per animam*." But the Editor of the *Banner* would needs be "*semel et simul*,"—priest and physician. Although we cannot teach this gentleman theology, yet we will strive to tell him something respecting the science of medicine, and the doctrines of homœopathy, in order that, the next time his versatile genius leads him into the domains of quackery, he may at least know enough on the subject to prevent practitioners of physic wondering whether his theological lore is on a level with his medical ignorance. Physicians are accused by the Editor of the *Banner* of having refused to investigate the claims of homœopathy. Ere he again writes railingly on this subject, let him learn what constitutes homœopathy. A man may prescribe infinitesimal doses of drugs, and not be a homœopathist; he may be a homœopathist, and not give incalculably little quantities of remedies. A homœopathist is *not* one who administers doses of medicine of inappreciable magnitude. A homœopathist *is* one who founds his *soi-disant* treatment of disease on the Hahnemannic dogma, "*Similia similibus curantur*."

It is by this dogma that the value of all treatment must be tested; the dogma must then be of universal application—a single exception and homœopathy is no more. How, with this fact before him, the Editor of the *Banner* can profess "a *general faith* in allopathy, and a *general faith* in homœopathy," we are puzzled to understand; unless a general faith in medicine mean, as we have been taught it does in theology, no faith. The homœopathists affirm that in the treatment of ague the scientific physician acts in accordance with the Hahnemannic dogma. The physician replies, "I give quinine in ague for the same reason that I bleed in acute sthenic pneumonia; *i.e.*, because *experience proves* that the drug, like the blood-letting, cures the patient."

Like things are cured by like—for every disease there exists a specific—that drug is to be chosen for the treatment of any given case which produces symptoms in a healthy individual similar to those present in the sick man. Such are homœopathic dicta.

Use that drug which experience has proved, on similar occasions, to have cured the same symptoms *when they arose from the same cause*. Do not regard symptoms only; look to cause, says the scientific physician.

Behold yon child! Its little limbs how fearfully convulsed! Its baby features how horribly distorted! Give it a drug that would, in a healthy child, produce similar symptoms, the advocate of the dogma of Hahnemann must urge. Learn the cause that has produced those frightful symptoms, and remove that, says the scientific physician. Every twitch of every muscle depends on irritation of the nerves supplying the convulsed part. The cause of irritation may be seated at a distance. Has the child eaten food unsuited to its powers of digestion? Has the presence in the stomach of an irritating substance given rise to the symptoms? If so, experience has proved, times and often, that an emetic, by removing the cause of the disease, will restore the child to health. Has the morsel passed into the intestine? A purge, by hastening its ejection, will rapidly effect a cure. Are the gums irritated and inflamed from the pressure of latent teeth? Lance them, and in an hour all will be well.

Ere the homœopathists, or their clerical friends, ask us to hold for nothing the therapeutical experience of men who, in those portions of our science respecting which there can be no dispute, have done so much,—ere they ask us to hold Sydenham's writings lightly, and Cullen's as trash,—ere they bid us put aside, as untrusty guides, Louis, Chomel, Andral, and Bright,—men who have shown that they have "lived laborious days," and have profited themselves and others by their work;—ere they bid us do this, and take Currie, Bachelour, Quin, and a host *as famous* in their stead, let them show that these men are capable of mastering more simple, and advancing less difficult departments of medicine than therapeutics. Here their labours could be, and would be, appreciated, and weight given to their opinions on the abstruse question of treatment. In vain have we sought for the name of a homœopathist who, by his researches in pathological anatomy, in diagnosis, in etiology, has added one stone to the temple of knowledge. We dip now and

then into their weekly organ, and on these subjects the ignorance displayed is most astounding.

The editor of the *Banner* insinuates, that scientific physicians invariably prescribe for the sick large doses of potent drugs, that they never leave Nature to her own unaided efforts; and then he quotes a book containing some of the greatest physiological nonsense we ever read, to prove that patients will get well who take only coloured water and bread pills! as if he need borrow a book from a professor of nobody-knows-what, at nobody-knows-where, to teach him a fact admitted by every medical practitioner in Europe,—unless his friends, the homœopathists, doubt it. Why, if the Editor of the *Banner* will only look into some of the hospitals in London, he may see the treatment he so much admires, minus only the humbug of the coloured water and bread pills, practised in many cases; in *many* cases, we say, not in all, because experience has proved not only that some persons recover from serious ailments by the aid of fresh air, abstinence, and repose, as quickly without as with the aid of drugs; but it has also proved—and here it is that scientific medicine leaves the do-nothing quackery so far behind,—experience, we say, has also proved, that some diseases, completely under the control of drugs, are, when left to themselves, necessarily fatal. The physician, if worthy of his name, then, not only knows when to hold his hand, but also how and when to seize the reins. By these two qualities he is distinguished from the advertising quack, who drugs patients requiring no physic, and from Homœopathists and Jenningites, who are unable to treat a disease demanding the exhibition of potent remedies. Suppose Nature to relieve the oppressed system by hæmorrhage, the physician stands by; the loss of blood, at first salutary, is proving injurious; he ought to know how and when to apply remedies more potent than bread-pills, coloured water, or homœopathic globules; and if he do not know, alas for his patient! Out of five such patients as we have imagined, four would probably recover if left without treatment, or, which is the same thing, if treated with globules. Of these four, two might, by the relief nature had afforded them, be better than they were before the hæmorrhage. In the *post hoc propter hoc* spirit, these men would doubtless, as Dr. Jennings's patients did, praise the bread-pills, or other inert medicaments (a); the other two of the four might also recover, but with permanently impaired health; yet they, too, would praise the compound they had swallowed. "But for it," they might say, "we should have died." Then comes the fifth. Would the Editor of the *Banner* be that fifth? Would he be willing, when he lay with fluttering pulse and blanched surface, to trust to the virtues of spoonsful of coloured water, or decillionths of a grain of anything?

Quacks fatten chiefly on three classes of men.

1st. Divines with large faith and little brains. We held one of these gentlemen up to the admiration of our readers in the last week's *Medical Times*.

2nd. Uneducated, and, consequently, credulous men. This class, incapable of weighing evidence, yield themselves up to the guidance of the highest bidder. The quack bids highest, and he has them. In this class we place the "intelligent and respectable young man" of the *Banner*. Ignorant and credulous he must be, or he would not attach such slight importance to change of air and so much to the globules; nor would he confound, as he does, the condensation of a drug, with its dilution to the ten-thousandth degree.

3rd. A class probably larger than either of the other two; a type of which has been thus quaintly drawn by old Burton—

> "Hypochondriacus leans on his arm—
> Wind in his side doth him much harm,
> And troubles him full sore; God knows,
> Much pain he hath and many woes.
> About him pots and glasses lie,
> Newly brought from apothecary.
> If this do not enough disclose,
> To paint him, take thyself by the nose."

(a) The following examples of the inability of patients themselves to judge of the benefit conferred on them by particular remedies will be sufficient to show the fallacy of any argument derived from the evidence of even "intelligent young men":—

A friend of our own was attending a union pauper patient. She was suffering from some variety of ulcer on the leg. Water was considered the most fitting application; internal medicines unnecessary. Thinking the woman might not apply the water, he gave a lotion made of tinted water. The woman complained that it was too strong, that it caused extreme pain. Our friend bid her put two tablespoonsful of water with each tablespoonful of the lotion. She assured him the next day that it now answered very well, caused no pain, and seemed to be doing her good.

Not many weeks since we were requested, while crossing the ward of an hospital, to see one of the patients, who considered himself suddenly worse. We did so, and, as it appeared, examined his chest more closely than the physician in attendance had considered necessary. The man was very ill, and believed himself dying. He was taking no drug, and we thought it unadvisable to prescribe anything but a *placebo*. The disease had reached its crisis; the same afternoon the man felt better, and showered blessings on our head for his cure. He had been getting daily worse under his ordinary physician, believed himself dying, was examined by a fresh practitioner, fancied a new remedy was prescribed, and to that which existed in his own imagination only, attributed his cure.

We could quote very many similar cases. Sir Charles Bell, in one of his Clinical Lectures, told the students they must be content, in practice, to be occasionally blamed when they deserved praise, for they would assuredly be often praised when they deserved blame.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Races of Men; a Fragment. By Robert Knox, M.D., &c., &c., and Corresponding Member of the National Academy of France. 8vo. Pp. 479. London. 1850.

Those who for the last two years have been readers of the *Medical Times* are fully aware that this Journal became the first exponent of the views held by the celebrated anatomist of Edinburgh upon the history of the "Races of Men," by publishing a series of lectures upon this interesting subject. These lectures have been more fully worked out in some points, and compose the present volume. It is unnecessary, therefore, that we enter into any detail respecting the specific opinions promulgated by Dr. Knox; but it may not be uninteresting to our readers if we express an opinion upon the general character of the more complete work. Dr. Knox styles it a "fragment," and such it undoubtedly is, and a fragment, moreover, having two distinct phases. Viewed in relation to either of the latter, few "fragments" like it have issued of late years from the scientific press of England. Dr. Knox's fragment is great, both for good and for bad. On the one side we know of no work which so prominently indicates the absolute necessity for an entire revision of the fundamental doctrines of the science called ethnology,—a revision, too, which, to our minds, must certainly be undertaken upon the principles indicated by Dr. Knox, and whose indications in the work before us stamp its author as a man of vast acuteness of intellect, extensive scientific acquirements, of great general knowledge and discursive reading, and, moreover, of refined taste in the plastic arts. These acquirements have been, in many instances, brought to bear upon a very favourite subject of the author in a most original and valuable method; and the "fragment" before us sufficiently proves that Dr. Knox is almost the only ethnologist who has seized the true fundamental elements which must form the basis of our reasonings upon many of the most important and interesting questions connected with the natural history of man. Those who have hitherto reposed satisfied with the *forms* and *methods* employed by Pritchard and others in building up our system of ethnological science, must, after the perusal of the present work, feel that they have to begin their investigation anew, and that, by the few pages offered them for consideration in the work of Dr. Knox, more real knowledge has accrued to them than after a laborious study of the ponderous lucubrations of the greatest

ethnologists of the day. Willing and desirous as we are to award all praise to the author for much that he has effected, and effected, too, with so little noise and ostentation, we yet feel it incumbent upon us to enter our dissent against the spirit of much, also, that disfigures and blots his pages. This is the other "phase" of the fragment—a phase, too, of a very melancholy aspect. It is not because this journal published Dr. Knox's lectures,—it is not because we deem their author a man of genius, of great acquirements, and an authority in anatomy and physiology,—nor is it because we think that the "fragment" now lying on our table is entitled to the highest consideration and respect of men of science, that we are to be restrained from expressing our sorrow and regret that too often, where Dr. Knox openly leads us in search for many of the *causes* of the physiologico-ethical relationships of man, or by implication or insinuation directs our inquiry, we find ourselves launched in the whirlpool of infidelity and unbelief. The *facts* themselves may have existed, and do exist, as Dr. Knox avers; but that they are necessarily associated with Christianity, or have sprung from the spread of its doctrines, is another question altogether; or that bitter sarcasms and semi-suppressed sneers against the purest and loftiest system of directions, for man's life and government, are either a beautifying or apt appendix to a treatise on ethnology, or an advantageous accompaniment to the science of the present day, we unhesitatingly deny to be the case. Upon this subject we would willingly have been silent; but, in relation to a work like Dr. Knox's, it is impossible we can be so, seeing how deep and broad, in its under-current, is the spirit of misanthropical sarcasm, of irreligion, and of the most forlorn aspect of humanity, that pervades its pages. On some very important points, then, Dr. Knox must be regarded as of no authority, the less to be regretted, however, since it is evident that directly Christianity (or, indeed, religion of any form) becomes a factor in the ratiocinative processes which he employs, he betrays at once an utter want of knowledge and conception of what it consists. There is some great error somewhere. Dr. Knox, we should have thought, was scarcely the person who would venture upon a judgment concerning that of which he was entirely ignorant. Of one thing, however, we feel quite assured, that if by any strange mistake he has ventured to do so, no one will more readily and willingly correct his error; and this, with respect to our present question, can readily be effected. A single morning's cursory perusal of a few chapters in the writings of St. John or St. Paul, as a mere intellectual gratification or inquiry—never mind religion—as to what Christianity consists of, just in the same way as Dr. Knox might read Aristotle or his favourite Le Vaillant, will prove to him the serious character of the mistakes he has been unwittingly and ignorantly led into. Dr. Knox, we may remark, will be able to find, in the little work called the New Testament, all the essential elements of the Christian scheme very beautifully yet concisely illustrated. So satisfied are we of the new and comprehensive view it is able to offer out to him, that we quite envy him his first perusal.

We must also complain of the very frequent repetition of the woodcuts. It has a strange appearance, from which the excellent and faithful pencil of Dr. Westmacott, of King's College, by whom the drawings were made, scarcely relieves them.

Works of the Ray Society. Seventeen Volumes. 1844 to 1849.

The Society which has taken the honoured name of John Ray for its distinctive title is now in the seventh year of its existence, and has published seventeen volumes. Although upon our book-shelves these volumes do not occupy so much space as those of some other societies, we discover the cause of this in the beautiful illustrations which accompany many of the works. The monograph of the British Nudibranchiate Mollusca, as an illustrated work of natural history, is quite unrivalled in our literature, and must reflect lasting honour on the authors, Messrs. Alder and Hancock, and the Society under whose auspices it has been brought out. This work is not yet completed, but there are already published of it fifty coloured plates in four parts. Equally important as a work of science, though not so extensive, is Professor Edward Forbes's Account of the Naked-eyed Jelly Fishes of the British Seas, accompanied with coloured drawings of all the species. Another important contribution to the natural history of our island is Dr. Baird's British History of the Entomostracous Crustacea. Drawings, most of them coloured, of every British species of these minute denizens of our rivers, ponds, cisterns, and water jugs, are given. This work is not only of great value as an addition to our knowledge of the family of crustacea, but will supply to those using the microscope, a means of identifying the numerous forms of these creatures so commonly found in our waters. In addition to these zoological works, the publication of which will form an era in the natural history of our island, the Society has translated Brumeister's admirable work on the Organization of Trilobites, with the original plates and notes by the author; and published two volumes of Zoological Reports. In botany not so much has been done; but still this branch of science has not been neglected. Three volumes of Reports and Papers on Botany, and a translation of Meyer's Geography of Plants are purely botanical.

Amongst general works, the Life and Correspondence of John Ray, edited by Dr. Lankester, in two volumes, will be read with interest by all who take a pleasure in the progress of natural science, or are proud of the worthies of their own land. To those who have a taste for philosophising, and would catch a glimpse of the regions into which science has yet to be pushed, we would recommend Oken's Physio-Philosophy. It is the work of a man of genius, and not to be approached without reverence. Those who scoff at it, may live to see some of its hypotheses become the generalizations of inductive science. The Ray Society has also undertaken the publication of a Bibliography of Zoology and Geology, which, under the editorship of Professor Agassiz and Mr. H. G. Strickland, cannot fail to be a most valuable boon to all interested in the pursuit of natural history.

We have been induced to give this slight sketch of these publications, from a conviction of their importance to all engaged in the prosecution of natural history and physiological science. It is among the members of the medical profession that natural history science has always been pursued most successfully, and it is from their continuing to cultivate a knowledge of the organic kingdoms of nature as a whole, that we can alone expect to advance to a rational pathology and therapeutics. The Ray Society, then, has special claims on medical men, not only as a union of naturalists for the advancement of the sciences of life and organization; but also on account of the truly valuable works which, at a marvellously small cost, it enables them to place in their libraries.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

THE TERMINATIONS OF THE OLFACTORY NERVE.

Dr. Hom describes the terminations of the olfactory nerves as being easily seen by taking a piece of a frog's nasal mucous membrane, placing it between glass, and examining it with a power of from + 216 to + 300. The extremities of the nerve-fibres, sometimes dilated and forming club-shaped processes, can be seen at their extremities, winding round and sometimes returning to the parent branch. Besides these, other nerves, with broad diameters, are seen passing in various directions, and present the characters of fine cerebral fibres.—*Müller's Archiv.*, 1850. No. II., p. 74.

ON THE STRUCTURE OF THE MUSCULAR SUBSTANCE OF THE HEART.

The following important observation is by Remak. The facts observed by him are best seen in the thin muscular layers which can be procured, especially in sheep, from the commencement of the great veins of the neck or the pulmonary veins. Two sets of muscular fibres can be distinguished; some which run parallel, and others which are between these and interlace, connecting the adjoining parallel fibres to each other. The net-work formed by the connecting or intermediate fibres differs in complexity in the different parts of the heart, auricles, ventricles, &c. Sometimes, instead of these intermediate connecting fibres, the sides of two parallel-running fibres approach, and fuse into each other (*eine partielle Verschmelzung der Ränder zweier Hauptfasern.*)

The intermediate fibres are often much smaller than the parallel, and of variable strength; occasionally, as in the ventricles, they are as large as the parallel fibres; it is then very difficult to make out the arrangement; yet in no place, either in the auricle or ventricle, is this arrangement wanting. This observation of Remak's has been confirmed in Wurzburg by Virchow.—*Müller's Archiv.*, 1850. No. II., p. 76.

THE BRONCHOCELE OF NEW-BORN INFANTS.

Dr. Betz, of Tübingen, has published an interesting essay upon this subject. He attributes the silence of authors respecting it rather to their having overlooked the affection than to its rarity. Such children are usually stout and full-blooded, and the enlarged thyroid may be mistaken for a mere fold of fatty integument. In some the neck seems merely too broad, while in others it undergoes no change; these differences depending upon the part of the gland engaged.

Immediately, or very soon after birth, a marked difficulty of respiration comes on, which may prove fatal in a few hours, or in two or three days only. The inspirations are deep, being accompanied by a peculiar croaking tone, that may be heard outside the door. The expiration is also very laboured, and sometimes accompanied by a cry. At times the breathing seems quite arrested, so that the child is in the most extreme danger from suffocation, until, with a cry, inspiration again occurs. The dyspnœa is sometimes irregularly paroxysmal. The alæ nasi are usually expanded, and the lips and hands of a blue colour. Sucking is impossible, and attempts produce the most extreme dyspnœa, which is also excited if the child be fed, the greatest difficulty prevailing in getting it to swallow the least quantity. The mouth is full of saliva and mucus, which collect in small bladders between the lips. According to the amount of disease, the remissions are longer or shorter, and the child sometimes at last goes off quite unexpectedly.

The affection consists in a simple hypertrophy of the thyroid; no change in its normal structure, save perhaps some increase in its vascularity, being observable. The whole gland may be affected, giving a crescent shape, and, where an isthmus connects the two lobes, the neck assumes a great breadth. In other cases only one lobe, or even only the apex of that, may be affected, and the nature of the disease be undetected. The passage to the larynx and trachea is more or less impeded, while the posterior development of the tumour impedes swallowing, and endangers suffocation in the attempt. The accumulation of mucus is an additional cause of obstruction. It is not merely the size of the swelling of the lobes, but its position, that determines the amount of danger.

The affection would seem sometimes to be hereditary, or, at all events, it affects several members of the same family. Various friends of Dr. Betz have observed this bronchocele of infants, but he is not disposed to consider it as especially endemic at Tübingen. He thinks that the suffocative dyspnœa, and death resulting from this disease, may elucidate the nature of some of the cases of laryngeal asthma, spasm of the glottis, thymic asthma, or laryngismus, concerning which so much confusion and doubt at present prevails. An enlargement of the thymus may certainly co-exist with one of the thyroid, but this last affords a much more rational explanation of the symptoms. Thymic enlargement may induce dyspnœa, but not the laryngeal disturbance. Atelectasis, too, the author believes, is often due to the impediment caused by this enlarged thyroid.

In a disease so rapid in its progress, little time remains for treatment; but, where this is obtainable, leeches should be applied, and an emetic given. Where the hypertrophy is less considerable, and the disease more prolonged, the internal and external use of iodine would be deserving of a trial.—*Henle and Pfeufer's Zeitschrift*, IX., Pp. 233-8.

ON THE FATTY CYSTS OF THE OVARIES.

Dr. Steinlin, of Zurich, having recently had the opportunity of examining a diseased ovary, containing a vast number of fatty cysts in every stage of development, believes he may communicate some additional observations of interest upon the mode of their development.

The case occurred in a woman after her fifth confinement, which was followed by metroperitonitis. This cured, there still remained inflammatory action in the region of the right ovary, and a large suppurating tumour eventually formed, from which seventy-eight pounds of matter were discharged by four successive punctures. She died soon after the last, of tubercle of the lungs, and the pus was found to have proceeded from a large sac, still containing several pounds, in communication with the ovary, which itself was found to consist of a great number of fatty cysts of every variety of size, from that of a hempseed upwards. The left ovary also contained several small cysts.

The cysts were found to contain a greater or less quantity of free fat, of various appearance, and in the older ones commingled with a considerable quantity of hairs, which were entangled together. On removing the contents of the cysts and cleaning their walls, these were found smooth and shining, save certain round insular portions which were of a dirty white, and gave rise to nipple-like projections, whence the hairs had grown. In some of these there were no hairs, but teeth or pieces of bone beneath the surface. The occurrence of such substances has led to the erroneous opinion that they are due not so much to new pathological formations as to some description of extra-uterine conception.

Dr. Steinlin enters into a minute anatomical description of the internal surface of these sacs, into which we need not follow him, as it will suffice to say he considers it perfectly identical with the external skin in structure. The *hairs* springing from the nipple-like projections have quite normal follicles, and there are numerous well developed sebaceous glands, together with a greater or less number of sudiparous ones—the epithelium, papillæ, hair-follicles, sebaceous and sweat glands being, in fact, identical with those found in the external skin. Just as on the surface a great accumulation of the secretion of the sebaceous follicles may take place, as in the *vernix caseosa* of infants, so an augmented secretion within these cysts gives rise to large accummulations of fatty matters. The primary change is, in fact, the formation of a structure exactly similar to the external skin. This fat thus secreted from the sebaceous glands is found mixed with a large proportion of epithelial scales, giving it an exact resemblance to the *vernix* of infants. At a later period, the proportion of fat secreted is augmented, and then it exactly resembles the fatty cysts of the skin. The secretion from the sudoriferous glands renders it of a more or less yellowish, transparent, and shining appearance, varying in colour and consistency, according to the proportion of such mixture with the increased development of the cyst; the sebaceous follicles also increase in number, so that at last the quantity of fat secreted becomes enormous.

In the early cysts no *hairs* are found mixed with the fat. They are first met with in the nipple-like projections, and then at their circumference. Their structure and development are precisely the same as those of the skin. They reach the length of four or more inches, and then fall off. Before they do so, however, the germ of a new hair is already in existence, and, as this is developed the old hair is thrust out. This supplanting process would seem to be one of rapid occurrence, for even in small cysts a great number of loose hairs are found, either firmly knitted together or lying loosely, according to the amount of space. In the older cysts truly enormous quantities are accumulated.

The *teeth* found in the ovaries, though misshapen and irregular, have more or less well developed fangs, and histologically are exactly the same as normal teeth, developed like them from a tooth-pulp. The development of teeth is not more extraordinary than that of hair. We find in some animals they are developed separately from the jaw, and only subsequently united with it and in some are not so at all. In fact, the enclosing the saculi containing the teeth within the jaw is not essential, being only a means for their better support and protection. The small portions of *bone* found in these cysts are of the most various forms, which it is quite useless to compare with the small bones of the body. The author admits the difficulty of explaining their origin. —*Henle and Pfeufer's Zeitschrift*, IX., 145—55.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

THE CHOLERA AT MARSEILLES.

The political journals announced, some days since, as a positive fact, an eruption of epidemic cholera at Marseilles, and some went even so far as to affirm that fourteen persons

were dying daily of the disease in that town. I am glad to say the alarm was a false one. It originated, probably, in the heated imaginations of the friends of the defunct quarantine board, to whom such an event would be a regular God-send. The truth is, a few dropping cases have occurred in Marseilles, as indeed in Paris, London, and many other cities, recently visited by the epidemic. The first death from cholera took place on the 29th of July. Since then, and up to the 27th of August, twenty-four deaths from cholera have been officially reported; but many of these were certainly not cases of *true* cholera, and the disease never presented the slightest appearance of an epidemic. The reports, however, have had the effect of inducing foreign governments to place under quarantine all vessels arriving from Marseilles, to the great detriment of commerce. If this were the object at which the late quarantine board aimed, it has been fully attained.

MESMERISM.

We have had the "modern sibyl" again on the *tapis*, pleading an arrest of judgment to the verdict of guilty lately pronounced against her, and especially to the thirteen months' incarceration, which would terminate at once her career and her commerce. The latter, it seems, was most flourishing, for it was proved, during the debates on appeal, that she had succeeded in extracting no less than 22,000 francs from the pockets of the credulous in the short space of one year. We have an English proverb which warns people from "sleeping over their affairs;" but here is a lady who makes a thousand a year while asleep. Her counsel, M. Jules Favre, made a vain effort to prove that the "sibyl" was just as honourable a practitioner as any of the descendants of Esculapius, and a crowd of persons, said to have been cured by somnambulic prescriptions were in readiness to give their testimony; but the judge, a man of common sense, though a great lawyer, refused to hear any of them, and so the original verdict against the "sibyl" was confirmed with costs. She is a very beautiful woman, of about twenty-five years of age, but evidently one of those females, so common in French society, destined to live on their beauty and their wits. We have had, however, another and a much more serious affair, which demonstrates the dangerous nature of mesmerism in the hands of unscrupulous and immoral persons. It reminds one forcibly of the scene described by Frederick Soulie, in his well-known novel the "Magnetiser." An amateur professor of the art, named Claude Ponsignon, was, it seems, in the habit of employing his knowledge for the most infamous purposes. His wife gave instructions in the trade of lace-bleaching to a number of young girls, and on the latter Ponsignon was in the habit of exercising his culpable practices. An accident disclosed all. Among the pupils was a child eleven and a-half years old. During the absence of his wife, Ponsignon threw the girl into a state of magnetic sleep, and then gave full scope to his vicious propensities. From some cause, however, the child, though unable to stir or cry out, was fully conscious of everything that passed, and related her misfortune on her return home. The magnetiser was tried at the assizes on the 19th, and found guilty on the clearest evidence. At first he attempted to deny the truth, but at last confessed, putting forward in his defence, that as he met with no resistance, there was consent, and therefore no crime. This plea, as you may imagine, met with no success, and the wretch was condemned to five years' imprisonment. For everything except political offences, the laws here are extremely indulgent. If my memory serve me right, a case exactly similar occurred many years ago at Berlin; the victim, however, was the daughter of a man of high rank. Facts of this kind ought assuredly to make the public reflect on the imprudence of encouraging a practice capable of producing such results. If the sale of poisons be forbidden, so should the use of magnetism, chloroform, &c., by any save medical practitioners.

Apropos of chloroform, allow me to correct an error into which Professor Lizars has fallen in a letter published in the *Medical Times*, August 24, p. 213. M. Velpeau does not "indiscriminately condemn the employment of chloroform in all operations," as the Professor conceives. On the contrary, M. Velpeau is in the daily habit of using it at la Charité, and with the best results. He is, of course, prudent, and always on the look out for an accident; but, as yet, sees no reason for the "indiscriminate condemnation" alluded to by Professor Lizars.

SCOTLAND.

COLLAPSE OF THE LUNG FROM BRONCHIAL OBSTRUCTION.

A few weeks ago, a discussion arose in Edinburgh, as to the mode in which what is termed "pulmonary emphysema" is produced; and, as some of its readers will remember, the points in dispute, and the proposed methods of resolving the difficulties, were stated in the *Medical Times* at that period. The discussion followed the reading of a paper by Dr. William Gairdner, before our Medico-Chirurgical Society. A great part of that paper has been recently published, and some passages in it seem to contradict the statements formerly made in the *Medical Times*, as to the theory of the production of pulmonary emphysema. The contradiction is, however, as yet more in appearance than reality; and as Dr. Gairdner promises, in a subsequent part of the paper, new considerations on the origin of pulmonary emphysema, and a reference to a totally different mechanism applicable to it from what Laennec contemplated, we must wait till this part be published before we can ascertain how far Dr. Gairdner's views are at variance with those formerly stated from Edinburgh in the *Medical Times*. One of the objects which Dr. Gairdner has particularly in view in the published part of his paper, is to show, that the general effect of obstruction in a bronchial tube is to diminish the quantity of air in the portion of lung to which it leads, so as frequently to produce a collapse of that part. The evidence he brings forward goes strongly to show, that such a state of the lung is one of the effects of obstruction in a bronchial tube. He cites experiments from Mendelssohn and Traube on animals, to illustrate the effect of such obstructions. For example: when a leaden shot or a ball of paper was inserted into the trachea of a dog, and pushed as far down as possible into the bronchus with a probe, the parts to which the obstructed bronchi led were red and void of air, and there were emphysematous portions in other parts of the lung. This common effect of obstruction to cause collapse of a portion of the lung arises, according to Dr. Gairdner, from the peculiar form of the bronchial system, the bronchi being a series of gradually diminishing cylinders, dividing, for the most part, dichotomously; so that a plug, lying above a bifurcation, comes to act like a ball-valve, permitting the air to issue in expiration, but completely closing the entrance of one of the tubes in inspiration. The view which Dr. Gairdner takes of this effect of obstruction, is altogether of very great importance, and is very well supported by his proofs. But we cannot help thinking that he has done Laennec very considerable injustice, at least if the passage which he has quoted be from the part of his work where we find a portion of the quotation. He represents Laennec as inferring, that the general effect of obstruction in a bronchial tube, is to cause an accumulation of air in the portion of lung to which the obstructed tube leads. Laennec is not speaking of obstruction in general, but of a particular form of obstruction, which he thinks permits the air to enter in inspiration, and impedes its exit in expiration. He makes no generalization whatever, as Dr. Gairdner's mode of dealing with his statements exhibits. There is no evidence whatever that Laennec would not have admitted collapse of the lung as one of the effects of obstruction, if his attention had been drawn to the subject. Laennec's statement was confessedly a speculative attempt to account for the occurrence of dilatation of the air-cells; and, as a mere speculative view, it is quite correct. It does not follow that it is practically correct; that must be judged of by its accordance with the uniform state of the parts, as discovered after death in cases of pulmonary emphysema. But, as Louis says, who declines to adopt it, it is the only explanation—meaning, we suppose, the only mechanical explanation—that can be given. We trust, Dr. Gairdner's forthcoming explanation will prove an exception. In the meantime, however, we affirm, that Laennec's speculative view involved no physical error, like the explanation which was adopted by some of the disputants in the original discussion before our Medico-Chirurgical Society.

IRELAND.

IODINE AND COD-LIVER OIL MANUFACTURE, WESTERN COAST OF IRELAND.

Among the many interesting specimens of Irish manufacture, lately exhibited in Dublin, Iodine *made in Gal-*

way, from the sea-weed abounding on the western coast of Ireland, has created no small degree of attention. From the immense quantities of sea-weed found in this locality, it is to be hoped it is the commencement of an extensive set of similar chemical operations; which, from the price of labour in the "city of the tribes," and, indeed, all along this wild coast, cannot fail to prove highly remunerative. From a casual examination of the specimens, I am glad to add my recommendation of it to that of some other of the chemical folk here; indeed, I am quite satisfied it was the most noticeable affair in the entire collection of so-called Irish manufacture this year. Large quantities of cod-liver oil, or oil made from the liver of several of the *Gadus* tribe, I find also among the riches of our western shores, and also exhibited in the collection. A large fortune awaits some one who will take up the trade spiritedly—this very valuable medicine, now almost a necessary of life, being easily manufactured, and extensively used by the peasantry along the coast as a mode of affording light in their long winter nights.

TREPOSCOPE.

An ingenious instrument with this name was also among the novelties of the late exhibition, and puzzled many people, as demonstrating the effect of quick impressions on the optic nerve; perhaps we may explain it. The printing on a card was rendered visible while revolving with the amazing speed of 40,000 times a minute. Opposite the card revolved a large black wheel, with a single slit; both revolved together, but in such a manner that the letters of the card were always uppermost when opposite the slit; the image of the letters only then falling on the retina in the intermediate almost indeterminable instant being guarded by the blank plate of the larger wheel. The instrument is interesting, as showing that it is the continuous succession of impressions on the optic nerve in the revolving card, and the spokes of an ordinary wheel, that makes both, so to speak, invisible. An interesting modification of the treposcope is afforded by the revolving card containing the prismatic colours, the card revolving being quite white till looked at through the chink of the larger wheel, when it will be green or yellow or blue as the case may be. In diagnosis of amaurotic and other affections, it is not impossible the instrument may be found useful.

MEDICAL CHARITIES BILL.

The abrupt semicolon put to this Bill in the House of Lords has created the most intense excitement among the Dispensary men in Ireland. The excellent aid of the *Medical Times*, the only medical periodical in England that has watched the Bill, is now scattered to the winds. The sick poor and hardworking practitioners attached to Dispensaries, have been sacrificed to the interests of ratepayers and place-hunters; and if the Bill is again to see the light it will be perhaps in quite a different form. To Sir William Somerville and the Government much credit is due for pushing it all but through both Houses of Parliament; too much ingenuity, however, was shown in other quarters in obstructing it and rendering it inoperative, which has proved too successful.

DINNER TO SIR BENJAMIN BRODIE.

There has lately been quite an ovation to Sir Benjamin Brodie in Dublin. On Thursday, the 29th ult., the worthy Baronet was invited to dinner by the President and Council of the Royal College of Surgeons in Ireland, Dr. Beatty in the chair. In proposing the toast of the evening,—"The College of Surgeons, England, and its most distinguished member," the Chairman alluded, in very warm terms, to the hospitality of the members of the English College in England, and the gratification felt by the Irish College in being able, in the smallest degree, to reciprocate the kindness. It was difficult to express in proper terms their sentiments of admiration of a man who was good as well as great, in his own presence; yet every one present appreciated fully those qualities; and, judging from the reception the toast met, entered very warmly into them. Sir Benjamin, in returning thanks in his own name and that of the College of Surgeons of England, said:—"The deepest sense of the professional exertions and ability of Irish surgeons was entertained by all his friends in England. In the steps of the Dublin College they were ever glad to follow, directed as they had always been to the elevation of their noble science. He had known some of those around him for nearly forty years, and he could safely say, he knew no body of men who, in his judgment, so well answered to the character of member of a scientific and gentlemanlike profession as the members of the Irish College." He alluded, in passing, to some of the triumphs of our Irish School, and spoke very highly of the plan of curing aneurism by compression, as noticed by us in the *Medical Times*, and brought into notice by Irish surgeons, and "which, he was convinced, would supersede every other plan. Such triumphs as these secured a very proud position for Dublin surgery." Before the close of the evening, Sir Philip Crampton presented Sir Benjamin Brodie with a complete set of the clamps and other instruments used in the treatment of aneurism, and a copy of Bellingham's excellent work, so that probably you will have an opportunity of seeing them in London.

SUNDERLAND.

HOMŒOPATHY.

Homœopathy, that most brazen of all the pathies, is rampant in the good town of Sunderland. We have "The People's Homœopathic Dispensary," at a shilling a month, for that most quackable of all classes—the working class, of which the presiding oracle is a *late* respectable, but somewhat unappreciated, practitioner from a neighbouring village; while a rival establishment—for the principle of profit is by no means infinitesimally developed in the pathies—puffs and advertises itself by placards and otherwise, as *the* genuine shop—institution; I beg its pardon.

To this, the more aristocratic in its pretensions, is attached an executive of consulting physician, an M.D. Edin.; a surgeon, M.R.C.S.E.; and a resident secretary-dispensary-man-of-all-work, with no title at all, unless it be ex-professor of mesmerism and peripatetic phrenologist. The *professionals* reside in Newcastle-on-Tyne, about 12 miles distant from this scene of their labours,—how a case of acute pneumonia would be managed, unless by electric telegraph, I know not—and medical gentlemen desirous of trying the system are kindly invited, through the local press, to make application for the infinitesimal preparations, which will be gratuitously provided them,—a mark of condescension which the public is respectfully requested to notice, no doubt!

The practice is said to be neutral enough, 1-16th minim of tinct. aconiti, being a vigorous effort in malignant disease; but, oddly enough, cod liver oil *ad libitum*, after the usual manner.

So far the game is successful, and Professor Holloway could not boast of more unmitigated success. Legs with but indifferent standing, and stomachs of long standing, are not proof against the decillionth reduction, *carefully prepared*. Hysteria is cured upon the ha! ha! system, and the whole genus of -algias, from odontalgia upwards, is carefully soothed, quelled, and expelled, at the shortest notice.

The system would scarcely deserve notice, had not there unfortunately been found men, once members of an honourable profession, who, forgetful of all decency in their selfishness, lend a powerful aid to an insidious quackery, and degrade their former brethren.

It is to be regretted that those colleges of which they are such unworthy members, do not at least deprive them of the power of disgracing the titles they have virtually discarded.

The profession, generally speaking, have acted with becoming spirit in the matter, and refused to meet or sanction in any way the proceedings of even the dabblers in the practice. In every town, and in all professions, there are to be found wavering and unsettled minds, whose very weakness forms the strength of their delusions; and it is to be feared that in this we have at least one who, in his flirtations with popularity, coaxes with one hand homœopathically when necessary, and is equally accommodating where allopathy is in the ascendant.

Such men should weigh well the consequences of detaching themselves from the firm and practical road to follow an *ignis fatuus*, however bright and tempting it may be; in grasping at the shadow of temporary advantage, they may irrevocably let fall the substance of permanent respectability.

GENERAL CORRESPONDENCE.

HALIFAX MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—Although I may not have the honour of being the "Correspondent" of the *Medical Times*, and although perhaps unknown, even by name, to its editor, yet I presume, upon an acquaintance with the profession for something like a quarter of a century, to obtain a little space in a journal which has hitherto exhibited so great an interest in the provincial districts, and, in particular, in that of Halifax.

In former years, this town was as little guilty of the sin of quackery as any in England, but, *tempora mutantur*, a sad change has come over it, and now Halifax may be said to be as fertile a hot-bed of quackery, and of irregular practice, as can possibly exist.

The unchecked license which has been given tacitly by the profession, and freely by the public, to every species of medical imposition, has emboldened greatly the impostors, so that now they not only openly prosecute their illegal calling, but they actually dare to enrol their names among those of the regular surgeons.

In a publication (replete with general errors, which has just been issued by a Bradford firm) called "Charlton and Co.'s Directory of Halifax for 1850," on referring to the list of "Surgeons," we find that no less than five unlicensed names appear, exclusive of those of two homœopathists, one of whom does not reside in Halifax at all. The names of these illegal pretenders are—Brierly, Fawthrop, Hartley, Kirby, and Wilkinson, the latter of whom is notorious for the defacing of buildings and of trees in the neighbourhood, by the most disgusting "private-advice" placards.

One is led naturally to inquire why such a state of the profession should exist in Halifax; and why, such a state existing, a medical protective society has not long since originated?

In answer to these interrogations, many causes may be advanced. There has been abroad a spirit of pseudo-liberalism,—a kind of medical free-trade feeling,—a disinclination to the protection of existing and legalised interests, which has greatly tended to the continuance of quackery. Following out these principles, there has been, by medical men themselves, the reprehensible buying "in the cheapest market" the medical services of the half-educated and unlicensed, which has encouraged these, their *quondam* serfs, to commence for themselves, in opposition to their former masters; and thus, some have brought down upon themselves the evil which they now loudly denounce.

The injudicious obtaining of young men as apprentices—the sons of poor parents, merely because their services could be had at a cheap rate, often, perhaps, for their food or clothing, is another and a common source, whence is poured forth upon society a host of, it may be, clever and meritorious "assistants;" yet unqualified men, who finally, on the death of their employers, must either practise illegally or starve, their previous life rendering them unfit for any other calling.

Self-supporting, or "penny-a-week" dispensaries, have become also a cause of medical irregularities, by the encouragements given even by physicians, to illegal practitioners; thus, in Halifax, a dispensary of this kind exists, whose tendency to favour quackery will be at once seen by a perusal of the following circular:—

"THE MESSRS. JAMES AKROYD AND SON'S SELF-SUPPORTING DISPENSARY.

"The Messrs. J. Akroyd and Son have thought it desirable to re-model the plan hitherto pursued, in affording medical aid to their workpeople, on a more approved principle.

"The contributions will be received as heretofore, so as to encourage a system of providence and self-reliance; but the medical staff has been enlarged, and attendance will be given on stated days of the week, whilst visits to the dwellings of such parties as are unable from the nature of their sickness to attend, will be continued as usual when required.

"The necessary arrangements, therefore, have been made, whereby medical attendance will be given at Mr. Pearce's surgery, Cross-hills, on Mondays, Thursdays, and Saturdays, between 12 and 1 o'clock at noon; and in the library-room at Copley Mills on Tuesdays and Fridays, at the same hour.

"Physician, Wm. Alexander, M.D.; Surgeon, Mr. C. W. Pearce: Collectors, Mr. Wm. Cockroft, Bowling Dyke; Mr. Danl. Dobson, Shed; Mr. Wm. Holgate, Copley. All medicines will be promptly prepared at Messrs. Pearce and Kirby's surgery at Cross-Hills."

The question as to the professional or non-professional character of such dispensaries is not at present mooted; this instance is merely adduced to show the encouragement that is thereby given to irregular practice. Mr. Pearce appears to be the surgeon of the dispensary. He has an open shop in Halifax, and a Mr. Kirby, of whom notice has been made above, is, or seems to be, a partner; for the circular advertises that "all medicines will be prepared *at Messrs. Pearce and Kirby's surgery*. At this surgery of Mr. Kirby, the physician must, at least occasionally, attend, for he is paid to do so; and he thus acknowledges Mr. Kirby as Mr. Pearce's partner, and thereby encourages and sanctions a high species of irregularity.

To the second interrogation—Why a society alike for the protection of the legal practitioner as for the public has not long since been originated?—it may be briefly replied: that several years ago such a society did exist; but it received so little encouragement from the Apothecaries' Company, that it was, after some correspondence with that body, dissolved.

Again, such societies have not hitherto been supported by the older and more influential members of the profession. These, when they enter upon the *otium*, seem to forget the *dignitas* of the profession. At the moment, a well-known couplet rises to memory, which, *mutato nomine*, well applies to these elderly gentlemen:—

> "As bees on flowers alighting cease to hum,
> So Whigs on places settle, and grow dumb."

Thus the young practitioners have been left to their own uncombined resources; and, if they do offer a show of resistance to imposition, at once, and hand in hand, the quacks and the public raise the cry of jealousy and of persecution! It has been said justly, that "when bad men combine, it behoves good men to unite;" and so now we trust that the day of union is not far distant; and the recent "case of malpractice in Halifax by an illegal practitioner," as recorded in your Journal, has roused all parties to see the necessity of such a legal combination.

The beneficial effect, then, which has sprung from the gross case alluded to, is the origination in Halifax of a united and determined working society, whose members have been brought together from all parts of this wide-spread parish by the indefatigable exertions of Mr. F. Garlick.

The first meeting of the society is to be held on Monday next, and there can be no doubt now but that its effective measures will, ere long, have to be recorded.—I am, Sir, &c.,

Aug. 23, 1849. Argus.

[A reference to the "Provincial Medical Directory" leaves us no alternative. We therefore insert our Correspondent's letter, assuring our readers that no allusion is made to the party political opinions of the day.

Since the above was in type, another Correspondent has favoured us with the following.—Ed. *Med. Times.*]

"Unity, Amity, Energy."—Halifax Medical Protective Society.—Established August 26th, 1850.—At a meeting of medical practitioners in the town of Halifax, the following rules were proposed and carried. The meeting was numerously attended:—1. That a society be formed called the "Halifax Medical Protective Society." 2. That the Society consist of all legally-qualified practitioners practising regularly in the town and neighbourhood. 3. That the objects of this Society be to give especial attention to the subject of the illegal practice of medicine and surgery by unqualified persons. 4. That, if need be, some member of the legal profession be employed by this Society, to institute proceedings against such persons as may be found to be practising illegally within the parish of Halifax. 5. That each member of this Society pledge himself, as bound in honour to decline meeting any person who may be considered by a majority of this Society to be practising illegally or irregularly. 6. That this Society be supported by an annual subscription from each member of ten shillings, and by such donations, in furtherance of its objects, as individuals may be disposed to contribute. 7. That Dr. Kenny be permanent Chairman of this Society; Solomon Smith, Esq., Treasurer; and Frederick Smith Garlick, Esq., Secretary, assisted by George M. Stansfeld, Esq. 8. That Wm. Ferguson Hol-

royde, Esq., be the Solicitor of this Society. 9. That the subscriptions be paid to the Treasurer as early as possible.

HYPERTROPHY OF BOTH KIDNEYS IN A NEW-BORN INFANT.

[To the Editor of the Medical Times.]

Sir,—Should you deem the subjoined case to possess sufficient interest to occupy a place in the columns of the *Medical Times*, its insertion would much oblige yours, &c.,

Rawson Senior.

Batley, 27th August, 1850.

I was recently requested by a friend to take charge of a midwifery case for him during his temporary absence. Upon my arrival, I found the labour to be a natural one, and to be progressing favourably. Immediately before its termination, however, my friend came; but I remained till all was over. The infant, a full-grown male child, did not breathe, although the pulsations of the heart were visible to a slight degree for some minutes; it appeared to have died from being asphyxiated by the umbilical cord, which was firmly entangled round the neck. Attempts at resuscitation were made, blood was allowed to escape from the cord, artificial inflation of the lungs was tried, and the warm bath; but not the slightest action of the diaphragm took place.

Our attention, however, was more immediately arrested at the peculiarly large size of the abdomen. Upon manipulation we detected two solid indurated bodies, occupying the hypogastric and iliac regions, and presenting the appearance anteriorly of an unusually large liver; and laterally, from the bulging out of the abdominal parietes, and from their position in the lumbar regions, they indicated the probability of their being enormous kidneys.

Not feeling satisfied as to their precise nature, we obtained permission to make a *post-mortem* examination, which was accordingly performed; and the first thing attracting our notice was the close proximity anteriorly of the lateral edges of the two bodies, yet that they were contained in separate and distinct sacs. The one to the right was removed first, and it proved to be a kidney of immense size; it was weighed, and the weight of it was exactly *eight ounces*. The left one was not taken out of the house for the purpose of weighing, but, from its appearance, it could not have differed more than a drachm or two in weight. The supra-renal capsule was no larger than usual; and the investing tunic, though somewhat denser than we commonly find to be the case, was easily detached. The kidney was composed of numerous lobules, some large, others small; the larger ones forming the outer boundary, and the smaller ones occupying the notch or fissure; altogether giving it the shape of an irregular oval body. When laid open, a quantity of urinous fluid oozed forth from the tubules, but their appearance presented nothing remarkable, being of a palish red colour, as is found to be the case in the kidney in its normal condition. The blood-vessels, proportionally larger in the fœtus than in the adult, as we well know, were found to exceed that proportionate increase in size to some considerable extent, the emulgent vein especially. The ureters retained their accustomed size, and the bladder, liver, and the other abdominal contents, had a healthy appearance.

Upon a review of this singular case, we cannot but observe the disproportionate arrangement which existed between the kidney and its supra-renal capsule. I believe that we generally find the supra-renal capsule to be a third the size of the kidney itself at birth; but here it did not correspond with the enlarged organ. But it would appear that compensation had been afforded to the blood-vessels, their calibre being much enlarged, and the great weight and remarkable size of the kidneys were doubtless inevitable results of the increase of development of the vascular system of the kidney,—the vital feeder of this important secreting and excreting structure; so that we may view the case as one of those singular freaks of Nature which are now and then produced, demonstrative alike of her influence and agency in overburdening as well as nicely adapting organs so highly essential to the economy and integrity of the functions.

PROCIDENTIA VAGINÆ.

[To the Editor of the Medical Times.]

Sir,—In your journal of the 10th August is an extract from the *Bulletino delle Scienze Medica*, giving an account of a procidentia vaginæ at the time of parturition. The case is extremely curious and interesting, but at the same time so incompletely recorded, and the treatment so extraordinary, that perhaps I may be pardoned if I draw the attention of your readers to it, with the view of showing how much a defect in taking down the facts spoils a valuable case, both to those who read it when published and those who may be engaged in attending on a similar case, and who would be likely to form a wrong estimate of what plan of treatment they should follow, from insufficient observation of the symptoms before them.

In Professor Rizzoli's case, the procidentia had, as usual, been temporarily cured by the enlargement of the uterus causing it to rise into the abdomen, but of course, when labour pains came on, the uterus was again drawn down, even to the extent of being propelled beyond the vulva, an occurrence which several cases on record have demonstrated to happen occasionally. It seems fair to suppose that the first pain produced this occurrence, combined as it was with the "raising a great burthen," but we are not clearly informed whether any part of the uterus itself was propelled beyond the vulva, except by inference from the tearing of the perinæum and "a body" being felt to pass. How the perinæum can have been torn at this time, unless the uterus with its contents had passed the os externum, I do not understand; yet it seems to have been found ruptured by the accoucheur on his arrival, before he had recourse to instruments. We are told that "a small foramen allowed a finger to pass up to the head itself." Of course the part most protruded would be the vagina, but we are not told that the os uteri was felt at all; are we then to understand that the os was fully dilated? That seems improbable; but if the practitioner had taken care to observe the facts, he would not have been so much at a loss, as he appears to have been, what treatment he should pursue. Again, we are told that attempts at reduction were vain, from the recurrence of pains, and that after some time mortification appeared imminent, from the amount of congestion observed in the protruded vagina. But to what is this congestion to be attributed? Was it not from the pressure of the distended uterus upon the veins of the displaced vagina, preventing the return of blood from it? If so, a constant firm support from the hand of the attending practitioner from the first would surely have prevented it; besides that, more than this, it would have enabled the contractions of the uterus to propel the head of the child against the os, and thus to dilate it. This, however, could not happen if no counter pressure was exercised against the bearing down of the pains.

Medical practitioners of the present day seem too little disposed to look back and learn what others have done in times past; yet there are on record several cases of *procidentia vaginæ et uteri*, at the commencement of labour, which well deserve to be consulted and borne in mind. Let me refer to a few of these. In a case recorded by Mr. James Shaw, in the "Memoirs of the Medical Society of London," (Vol. I., p. 213, A.D. 1786,) when mortification appeared commencing, the perinæum was found, on examination, to be dilatable; it was, therefore, dilated by the finger; the protruded mass then slipped back, and the patient fell asleep for two hours; after which, pains again came on, and a fine boy (her fifth child) was born by the natural efforts. The woman bore subsequently two children, and never afterwards complained of more than a slight bearing down.

In the "Medical Museum," (Vol. I., A.D. 1763,) Mr. Antrobus, of Liverpool, describes the case of a poor woman, who conceived of her fourth child while labouring under a "prolapsus uteri." She went her full time, although the cervix became "scirrhous" from exposure, and, at the time of labour, the first pain drew up the uterus, but, the waters afterwards breaking, it was propelled down again before the head. Counter-pressure was therefore made, and the part lubricated; the child was born, and the "prolapsion" replaced. The woman did perfectly well.

Mauriceau gives the following case, (Obs. 6, A.D. 1669): —The uterus had protruded during labour to the extent of half a foot, and was as big again as the head of an infant.

The os looked like a phymosis, of which the lips were three fingers' breadth thick, and quite livid. He introduced his hand by degrees into the uterus, and thus guided the head in its exit. He subsequently applied a pessary.

Portal (Obs. 10, A.D. 1666) describes a case of protruded uterus in a first pregnancy, where the orifice was only half a line across. After consulting with M. Moreau, he introduced very carefully a silver sound; by this means he was enabled to insert his finger, and so dilate the orifice still more, it being, after three hours' dilatation, the size of an "*écu blanc*." After an hour's cessation, the dilatation was renewed, by both hands being carefully insinuated; the bag of waters assisted, and two pains brought the child into the world. The uterus was replaced, and all did well. This woman, previously to her marriage, had always had a "relaxation," but could easily replace the womb; during her pregnancy, however, it ceased to come down till the labour set in. In several respects, this resembles the case recorded in the *Medical Times*.

Smellie (Collection XVII., No. i., Case 2. A.D. 1746.) describes a third labour, in which the os uteri was pushed down by the pains beyond the os externum:—"During every pain I kept up the child's head, and the mouth of the womb, which I gradually dilated with my finger, till, being fully opened, it easily slipt up all round the head, and this afterwards opening the os externum by degrees, was safely delivered." Perfect (Case 77, A.D. 1766) relates a case in which there was "an entire hernia of the uterus," yet the os uteri was "so high up, that he could but just reach it with his finger in the vagina." "He gradually distended the os tincæ," introduced his hand, and, finding the feet presenting, seized them, and brought away the child.

The case related below has never, I believe, been given to the public. I have therefore the more pleasure in introducing it here, as it is an excellent example of this class of labours. The case occurred several years ago in the practice of Mr. Gristock, surgeon, of Wardour-street, Soho. Mrs. Purdie, the wife of a journeyman gunmaker, in Little Pulteney-street, a delicate woman, had already been the mother of two children. After the birth of the second, she was much troubled with a sensation of bearing down, and sometimes of slight protrusion of the uterus, which she endeavoured, very ineffectually, to remedy by wearing some kind of bandage. The protrusion became greater when she next became pregnant, but diminished, and was at length wholly removed, as the uterus enlarged from gestation. When, however, the labour drew near, she was again sensible of much weakness and bearing down; and at length, when the pains actually came on, she was much alarmed by finding that a large fleshy mass had passed through the os externum with a good deal of fluid discharge. She sent for Mr. Gristock, who found that not only a considerable portion of the vagina was protruded, but that the os uteri was to be felt considerably without the os externum. He ordered her to bed, had the parts freely fomented, and requested a friend to visit the patient with him. They found her much alarmed, but presenting no symptoms indicative of danger. It was, therefore, determined not at present to employ any active interference. The pains at first were not strong, but as they increased in strength it was thought advisable to expand the hand over the protruded part, so as to make the ends of the fingers afford five points of support to the prolapsed vagina. By degrees it appeared to recede during the pains, and, at last, during a very strong pain, the whole mass slipped up into the pelvic cavity; the infant was speedily born, the placenta came away, and the uterus contracted firmly, remaining in its proper situation. This woman got quite well, and in less than two years became pregnant again; she then came under the care of Dr. Hugh Ley. The same procidentia again took place, and was managed in the same way, with the same happy result. After some time she became pregnant again, but on this occasion there was no prolapsus; the child was found to present by the arm, and was turned by Dr. Ley, but was still-born. A very interesting question may be asked here, namely, Did the transverse position of the child on this occasion prevent the ready subsidence of the uterus into the pelvis? I have been unable to obtain any further account of this person after this last confinement.

I cannot help regretting that the accoucheur in the case recorded by Professor Rizzoli did not practise the same form of treatment which has proved so effectual in the hands of the above-named experienced practitioners. He would then, possibly, have saved the life of the child, and have avoided the lacerations of the vagina and consequent hæmorrhage recorded. Let me merely add, that I have presumed, in this criticism, that the rupture of the perinæum took place before the medical man arrived; but if we suppose that, as in Mr. Shaw's case, the uterus descended without tearing the perinæum, the employment of the forceps would be almost certain to produce that accident.—I am, Sir, &c.,

S. Wm. J. Merriman, M.D.

34, Brook-street, August 27, 1850.

TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

Sir,—I am induced, chiefly from a sense of duty, to send you a few practical remarks and facts from my own experience, respecting the treatment of epidemic cholera.

On its nature I will offer no conjecture, but affirm my persuasion that it has no specific principle entirely *sui generis*, but is the result merely of occasional and extreme aggravations and augmented intensity of the same general causes which usually induce common diarrhœa and dysentery; just as ordinary fever may become typhus, and as typhus itself may in Turkey and Egypt become the plague.

Yet cholera requires special treatment; and having, since February, 1849, treated about 100 cases of cholera, of which only 3 died, I am filled with horror at the average mortality under the common treatment, and am impelled to make this communication. I speak in all soberness when I say, that nine out of every ten cases of cholera are easily curable. But what, the reader will ask, do you call a case of cholera? If, when bowel complaints are epidemic, a patient presents great nervous prostration, Hippocratic visage, sanguineous congestion, feebleness of the pulse and heart, muscular spasms more or less general and severe constant nausea or retchings, frequent fetid and liquid alvine evacuations, especially if both the vomitings and stools be almost, and often totally, without bile, and the fluid discharges are little else than serum, having fibrinous coagula floating in it,—that I call a clearly marked case of epidemic cholera, and Asiatic, if you please. The preternatural icy clamminess, and dusky purple tinge, are not always seen in a high degree.

Now, about 40 of the 100 cases I speak of were such clearly marked cases. The others I consider to have been cholera, but not so fully developed.

My treatment in the first class of cases has been to have the patient well wrapped up in bed, and, according to the degree of animal heat present, to apply plenty of dry heat by means of several hot-water bottles, or bags of sand or salt. I prefer the sand, as it seems to communicate not merely heat, but electricity too, which appears a first desideratum. As medicine, I give immediately in one dose as much solid opium as will check the purging forthwith, and suffice to increase and sustain the power of the pulse. The quantity necessary varies from six to twelve grains, and can only be foreknown by experience. If the case be extreme, from sixteen to twenty grains may be required; but I never give more than ten or twelve at once, exhibiting six or eight more in an hour, if the purging continues. The opium and heat soon entirely disperse the spasms and vomitings, and free perspiration breaks out. Then is the time for diffusive stimulants; give spirits, ether, ammonia, camphor, carminatives, and strong coffee, at discretion, with warm water *ad libitum*, to sustain the perspiration for some hours. Stevens's salines may be usefully conjoined, as they certainly change and thin the crasis of the blood. In two or three hours the patient is generally out of danger; but, in a few desperate cases, I have rallied them by the addition of assafœtida and turpentine enemata.

The great and sole objection to this method is its apparent hazard from the opium; but such danger is seeming only. Let practitioners try it, feeling their way along; but it is useless to begin with less than six grains of opium for a dose, increasing as they can gain confidence. They will soon find that, in real epidemic cholera, from ten to fifteen grains of opium is borne almost without a headache. I affirm solemnly, that I have not seen one distinct case of dangerous narcotism from its use as above; and it may be safely so exhibited even to delicate females. Medical men do not hesitate about the free use of opium in severe cases of delirium tremens, te-

tanus, and hydrophobia, though in the last without benefit. Why should they in cholera, where, well used, it is almost a specific? For myself, if the pretended dangers were real, I would rather die of opium than of cholera, and so, surely, would all who know the two states. Moreover, if nine in ten can be cured, humanity, science, and morals, authorize, nay, demand that it shall be done, even though with risk to the tenth. But probably it is less hazard to their patients than hazard to themselves by which medical men are deterred. They naturally dread even the false imputation of homicide; they fear also the *odium medicum*. Well, then, let them take due care of themselves; but, while doing so, let them try, and they will find a wide margin still left, within which to act for the salvation of many lives, and the increase of their own success. As a general rule, those who would avoid all risk should not adopt the method recommended in cases where the pulse at the wrist is imperceptible, and where the stools have been very copious, consisting of nothing but serum, nearly or quite transparent, and of clotted coagulable lymph. But so long as the pulse still beats with a certain rhythm and volume, and while the stools still retain some bilious fæculence, especially if the patient be not plethoric, the above treatment is sure. I have only to add, in justice, that the administration of these very large doses of opium in cholera seems to have originated with Dr. Hawthorne, of this town, although I had previously given as much as six grs. at a dose.

Should you record this statement in a corner of your admirable columns, I may send a few further words on the preventive and convalescent treatment of choleraic patients.—

Yours respectfully, THOS. COOKE.

67, Cornwallis-street, Liverpool, Aug. 27, 1850.

P.S. In Mason Good's "Study of Medicine," article Cholera, will be found the case of a man in hospital in India who accidentally got a double dose of laudanum, which at once cured him. Unhappily there was no Newton or Hargreaves to follow out the induction.

GLEET QUESTION.

[To the Editor of the Medical Times.]

SIR,—I have read, with some considerable interest, Dr. Johnson's theory on gleet, as also the more recent production, confirmatory of it, by Mr. Fletcher. It is generally admitted that accurately reported cases, even to their minute details, tend more to confirm or overthrow new views than any arguments, however skilfully conducted; and when those reports come direct from the pen of a medical practitioner, however imperfect his abilities to report may be, methinks they should have at least equal, if not more, weight, than when reported from ordinary patients through their medical attendant.

X. Y. Z., about four months ago, contracted a very mild gonorrhœa, which, from riding and indulgence in wine, was protracted longer than ordinarily; at length it yielded to the generally used remedies, but, on more than usual exertion in dancing, was soon succeeded by a slight muco-purulent discharge, which, on rising in the morning, was observed to have more the characters of pus, but gradually becoming paler and more tenacious as the day advanced. Every remedy that a fertile imagination could devise was ineffectually tried. A circumstance occurred which rendered the presence of a stricture possible; the introduction of a No. 7 catheter was tried without avail, being obstructed immediately behind the bulb by a tight stricture. No. 2 was at last passed by the patient himself, who, by great perseverance, succeeded in fully dilating the contracted portion. But now he had to contend with another and no less difficulty:—During the whole of this time, though the catheter would be well socketed in, and passed beyond the stricture, yet it was found impossible to pass it through that portion of the canal enclosed by the prostate gland. The pain produced immediately the instrument came up to the prostate (and this was ascertained by examination per anum) may be compared to that caused by boiling water passing over a highly sensitive surface. Thus the case proceeded for a considerable period; the stricture was cured, and the Doctor puzzled. About a week ago he had occasion to dine, for three days successively, with friends who indulged freely in their potations, and, being almost tired of an abstemious life, he joined the merry crew. The discharge was increased to a very considerable degree after the third day; and, being especially anxious to get well within a fortnight, he took, for two days, about 1 oz. of cubeb and copaiba paste every two hours, and passed No. 7 catheter as far as he was able. The discharge suddenly diminished much, and inflammation of the testicle supervened; for this leeches were freely applied, especially at the lower part, where the epididymis was found much thickened, and recumbent posture, with starvation, enjoined. As the inflammation subsided, the discharge recurred, and continued for two days, when it gradually became less, and still continues on the decrease. A disagreeable sensation of constriction, on passing stools, which was formerly felt, has entirely subsided, and a slight mucous discharge from the lower part of the rectum has also disappeared. The patient is still on the sofa, and he would have delayed this communication till the termination of the case, were he not perfectly satisfied that the views of gleet taken first by Dr. Johnson, and subsequently adopted by Mr. Fletcher, are more feasible than any yet submitted to medical men; and he here deplores the unsatisfactory and incomplete description given of this and other diseases of triflingly surgical importance, in the general text-books of the day. Pathology, to which the modern practitioner is so much indebted, has done nothing for this and many similar diseases. Is it that the anxiety of mind and bodily depression consequent on a protracted case of gleet, are insufficient to rouse those having the means of *post-mortem* inspections to use them? The views of Dr. Johnson and Mr. Fletcher are as yet quite speculative, and of course, to be received without any reserve, require some further demonstrative evidence; but their respective treatment is novel, and, if successful, a point is gained. Let those having the opportunity—and there are many attached to hospitals, as I know by personal experience, who have—let no chance escape them. I have attended many *post-mortem* inspections in London during my pupilage, and made many. Rarely, indeed, except under the instructions of my friend Mr. R. Quain, have I seen the urethra the subject of minute investigation.—I am, Sir, &c.,

Aug. 13, 1850. X. Y. Z.

MEDICAL MISERIES.

[To the Editor of the Medical Times.]

SIR,—A surgeon, a physician, a general practitioner, by whatever title you designate him, has a harassing life to pass through; his life is one continued act of duty,—he is always on duty, and his responsibility the most awful, viz., the life or death of the individual man. Why it is, or why it should be, and wherefore it comes, is difficult of solution, that, beyond all men, he is the most imposed upon, from the Government downwards. All classes of individuals cheat him, and it can be called by no other name under heaven than by that base, immoral substantive term—a *cheat*. He is dodged and cheated by the Registration-office; he is dodged and cheated by the Poor-law Board; he is dodged and cheated by insurance offices; he is dodged and cheated by all corporations; and, by submitting to all, he dodges and cheats himself, and dies, if not an actual pauper, nevertheless he dies poor.

Now for the first act of dodging and cheating mentioned above. The Registration-office should pay the medical man for certificates of death. Lately, they of that office have had the audacity to issue a most complicated form of certificate, without consulting the profession, even prying into the kind of attendance the medical man gives his patient,—a sort of gratuitous business which I cannot see the demand for, except to use against the profession. The certificates of death are a most abundant source of annoyance to the medical practitioner. I speak for myself, and I know other men must suffer the same. From the wretched way in which labour is paid, poor parents are glad to see their children taken from them; as they justly say, "They go *weel* for themselves, God's way is a good way." These are the expressions I hear made use of every day in my life; it is hard necessity that is the mother of such expressions, and the medical man bears all the annoyance connected with such a state of things, and without fee or reward. The rich manufacturers, the rich landlords, the rich tradesmen, starve their labourers,—the labourers generate children, and are glad to see them die; they, therefore, never seek medical aid till the last breath is about to depart; then, in an alarm, at the most unseemly hour, they call for

the doctor, rouse him out of bed, and ring the cry of death in his ear,—"Oh! come and see my child, it is dying, and God will reward you." Who can resist this cry, and yet it is in many instances hypocrisy. Well, off the doctor goes, amidst wet and cold and darkness, perhaps miles; having arrived at the far end, surely death is there. Amidst poverty, filth, foul air, scarcely a hole for the light of heaven to enter in at, there the child lies, emaciated, dirty, and suffering; surely "God's way is a good way," for the sight makes you involuntarily pray for death to close the sad, sad scene. The child dies, and a certificate is demanded; and you may then learn that you would not have been troubled had the people not thought there might be some trouble in getting the child buried without a medical certificate. These are the certificates the Government wring from you by a pat on the back, and cry out against the illiberality of the professional man who refuses to certify. I say the Government have entailed trouble and annoyance beyond measure on the medical man, and ought to pay him for it. They pay some old stupid district registrar for transmitting the medical certificate, but the author of the certificate they turn a cold shoulder to, and cunningly evade his claim. So much for the Registration-office and medical men. The dodging and cheating of the Poor-law Board require no verification. The complaints and poverty of those holding office under that Board speak for themselves. The Poor-law officer, like the adjutant in the army, ought to have a horse found him where such is required, besides having the medicines paid for; the medicines for a district might be estimated, and a sum given to pay for them, and then the salary might easily be adjusted; but to pay him a small salary, to include the keep of a horse and all appliances and medicines, is the way to make medical men paupers instead of improving and lessening the paupers themselves; certainly it may be considered an improvement in the class of paupers to introduce medical men as paupers amongst them; and, if such is the object of the Poor-law Board, they surely will accomplish their object, and that before long. If the Poor-law medical officer succeeds in getting into private practice, it may stand in the light of promotion to the adjutant, and not as a thing to grudge him of, as the Poor-law Board seem to think it.

Insurance offices have dodged and cheated medical men long enough; but how grand the retribution. I know one instance of a powerful insurance company, who, having refused to give a fee, got a *gratuitous certificate* from a very respectable old medical man, who ought to be ashamed of thus going counter to the interests of the profession; nevertheless, he gave such a certificate, and I know he certified the health of a person who has a deadly complaint in embryo. He knew it not. How should he, poor man? Diagnosis is different now to what it was in his days of instruction. A large sum depends upon this.

The sanitary corporations have all along cheated the medical man. The consequence is, they are in a state of disrepute, and medical men will still have to be called in to help them through the mud. They do not know the merits of the subject they have in hand,—they think they are all-powerful to vanquish epidemics; but, oh! their presumption. Alas, for man's humility! What a corporation they are!—I am, Sir, &c.,

A General Practitioner.

THE COLLEGE.

[To the Editor of the Medical Times.]

Sir,—Will you have the kindness to answer me, if possible, the following questions, which arise from a letter, published in your last number, from the Royal College of Surgeons to Sir George Grey, Secretary of State.

A Subscriber since the Commencement.

1. How will the College act towards those general practitioners who merely hold the College diploma; are they to be incorporated in the College scheme?

2. What provisions will they make (if they deny to them their existing privileges) for those gentlemen practising before the Act of 1815, who have neither medical nor surgical qualification?

Also, the legally qualified medical practitioners, who do not hold the College diploma, but who have been educated as general practitioners, and practise as such.

[The College seem to say, that the practitioners referred to in our correspondent's queries, ought not to be incorporated into the proposed new College unless they become members of the College of Surgeons. Perhaps the College might be willing, on receiving a *consideration*, to grant a year of grace, during which all who pleased might be enrolled as members, *i.e.*, without examination. The value of the diploma thus obtained would be nearly as great as that given by the College to its present members, at least in the eyes of the Council. The former would be worth nothing; the latter, the Council say, is worth very little more.—Ed. *Med. Times.*]

INCONSISTENCIES OF THE COUNCIL OF THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

Sir,—There are some inconsistencies in the arguments brought forward by the Council of the College of Surgeons, which you will forgive me for pointing out.

The Council says, that "general practitioners are almost universally engaged in medical practice, and have few opportunities to practise surgery, and fewer inducements to cultivate it as a science;" and, accordingly, when a *College* of General Practitioners was projected, the Council refused to allow it to examine in surgery, maintaining that its functions should be medical only. So far the Council is consistent. But, it says further, that it "cannot recognise, as general practitioners," those medical practitioners who have no surgical qualification.

Now, if it be true that general practitioners are so exclusively engaged in medical practice as the Council pretends, how is it that a *surgical* qualification is so imperatively necessary? And why not insist on their possession of a *medical* diploma? For, although the Council would outlaw all "mere licentiates of the Hall," by proposing to exclude them from the benefits of the projected College, it does not hint at the same exclusion with respect to those members of the College of Surgeons who have no *medical* qualification. If the assertion of the Council be true, those who have only a medical qualification are better entitled to consideration than those who have only a surgical one.

In short, in its arguments against allowing the new College to examine in surgery, the Council persists in regarding the general practitioners as *medical* practitioners only; but when arguing for the propriety of its exacting the sum of twenty-two pounds odd from every one of the general practitioners, it insists that they are all surgeons.

Happily, from the tone of Sir George Grey's letter, it is evident that in any general measure for the organization of the profession, the Government does not intend to inflict any retrospective injustice by excluding any. Before the College can be allowed thus to insist on the possession of its diploma as the only proof of the possession of "sound chirurgical knowlege," it ought to attend better to the practical qualifications of its members. It has never yet been proved that an average M.R.C.S. really possesses more surgical knowledge than even an average L.S.A. A few weeks ago, a member of the College, one of my neighbours, sent for me to show him how to pass the catheter in a case of enlarged prostate. I went with him, and succeeded where he had failed. The next day I was passing the house; my friend bolted out and called me in again. He had been there two hours, knowing that I had gone by. I passed the catheter for him again, and this time, for fear of being baffled once more, he tied the catheter in, and kept it in till the old man, a union patient, died about ten days after. Another of my neighbours, who is an M.R.C.S., sent for me a few months since to be present while he operated for strangulated inguinal hernia. I say nothing of the operation; but as we walked away together, my friend congratulated himself on having divided Gimbernat's ligament!!

I do think that a college of general practitioners could provide for "the ordinary exigencies" as well as the College of Surgeons does, to say the very least. And I think, also, that the latter College must not propose to outlaw the "mere licentiate" until it has really supplied a better set of surgical practitioners.—I am, Sir, &c.

A mere Licentiate who has been sixteen years in General Practice.

August 31, 1850.

MEDICAL NEWS.

Military Appointment.—Hospital staff; Fitzmeade Tynte Dennis, gentleman, to be assistant surgeon to the forces, *vice* Dolee, promoted.

Naval Appointments.—Surgeon R. Stevenson (1841),

and assistant surgeons Cecil Crandell (1843), and S. Denny M.D. (acting) to the Portland; surgeon James Browne, M.D. (1833), to the St. George, 120, at Devonport; surgeon W. Gunn, M.D. (1835), to the Cumberland, 70, at Chatham. acting assistant-surgeon, James F. Stoddart (1850), to the Portland, 50, flag-ship of Rear-Admiral Moresby, C.B., on the Pacific station.

Obituary.—At Henley-in-Arden, on the 28th ult., Hugh Francis Burman, M.D., aged 35; on the 30th ult., at 37, Mortimer-street, Cavendish-square, George William Young, Esq., surgeon, aged 75; on the 30th ult., in Friar-street, Reading, John Bullcy, Esq., surgeon to the Infirmary, aged 76; on the 23rd ult. in London, Henry Thomas Clarke, Esq., surgeon, aged 40; on the 21st of June last, at Nainee Tal, Bengal, assistant-surgeon D. Morgan, of the medical establishment.

Cholera.—This epidemic disease is very prevalent in Egypt. At Alexandria there are fifty deaths daily; at Cairo double the number, while it exists with more or less severity throughout the Delta. It has also broken out in Sweden and among the Danish forces in Schleswig-Holstein. At Copenhagen it is very severe. There were 450 cases, and 108 deaths on the 24th. The islands of Lolland and Fulster are infected.

HEALTH OF LONDON DURING THE WEEK.

The health of London is now better than it usually is at this season of the year. 882 deaths were registered; the average of the 10 corresponding weeks (1840-49) is 1078; or, corrected for the increase of population, 1176. If the week of 1849 is omitted—when 2796 persons died—the corrected average is 968; and the deaths last week are less by 86 than this number.

In the last week of August, 1849, cholera carried off 1663, diarrhœa 234 lives; in the corresponding week of this year the deaths from cholera were 4, from diarrhœa, 118; and at the present time there is no trace of Asiatic cholera in London. A costermonger, with diseased kidneys, died of English cholera in Walworth on August 21st; three cases of cholera infantum were also registered in the week.

In addition to diarrhœa, the two zymotic diseases that deserve attention are typhus and scarlatina; typhus was fatal to 14 children, to 23 adults between the ages of 15 and 60, and to three old people, in all to 40 persons: scarlatina and putrid sore throat to 28 children under the age of 15, to 4 adults, and to 1 person in advanced life. Scarlatina, which is so fatal to young persons, has been advancing slowly for the last thirty weeks; it was fatal in the three series of ten weeks in 146, 185, and 212 cases. It will be observed in the Registrar's notes, that, as is usually the case, the disease has prevailed with severity in particular localities. The Registrar-General observes:—

"The prevalence of intolerable fetid exhalations from the sewers during the week appears to have attracted attention. What would be thought of the arrangements of a city in which the smoke was poured from the street level? yet it is known that smoke is much less noxious than the poisonous vapours that are still suffered to exhale from the gullyholes into the streets and houses of the metropolis. If an epidemic of scarlatina is impending, the removal of this nuisance should be immediately considered, as nothing tends more to make scarlatina a putrid disease than stinking, putrescent vapours.

MORTALITY TABLE.

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	20	Heart	29	Phthisis	120
Bronchitis	29	Hooping-cough	24	Pneumonia	33
Cholera	4	Hydrocephalus	16	Scarlatina	33
Childbirth	8	Influenza	...	Small-pox	10
Convulsions	30	Liver	8	Stomach	2
Diarrhœa	118	Lungs	3	Teething	6
Dropsy	13	Measles	11	Typhus	40
Erysipelas	2	Paralysis	19	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	727	451	276
Females	734	431	503
Total	1461	882	579

Deaths in the week ending Saturday, Aug. 31, 1850.
(Metropolis.)

Causes of Death.	Aug. 31. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	411	307	160	882	10781
Specified Causes	410	306	160	877	10756
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	204	42	21	267	4288
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	1	23	16	40	450
Tubercular Diseases	45	110	6	161	1711
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	45	29	29	103	1121
Diseases of the Heart and Blood-vessels	2	20	11	33	243
Diseases of the Lungs, and of the other Organs of Respiration	27	24	24	75	719
Diseases of the Stomach, Liver, and other Organs of Digestion	14	15	5	34	728
Diseases of the Kidneys, &c.	...	7	2	9	74
Childbirth, Diseases of the Uterus, &c.	...	11	4	15	102
Rheumatism, Diseases of the Bones, Joints, &c.	...	2	...	2	61
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	7
Malformations	1	...	...	1	12
Premature Birth and Debility	31	...	...	31	230
Atrophy	22	3	7	32	209
Age	...	...	33	33	439
Sudden	6	1	2	9	86
Violence, Privation, Cold, and Intemperance	12	19	...	32	276
Causes not Specified	1	1	...	2	25

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Aug. 31, 1850.	Sum of Ten Weeks.
London	1948369	882	10781
West	301189	122	1571
North	376568	181	1735
Central	374199	144	1852
East	393067	208	2597
South	503346	227	3026

METEOROLOGY OF THE WEEK.

Day.	Electricity.*	Rain in Inches.	Amount of Horizontal Movement of the Air.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Ditto. Dew Point.	Mean of Thermometer. Dry.	Mean of Barometer.
Sunday	Nothing was shown at any examination.	0·02	Miles. 240	Calm & S.W.	P.M. S.W.	— 1·1	52·8	59·1	29·838
Monday	Nothing was shown throughout the day.	0·07	325	S.W.	N.N.W.	+ 1·3	52·6	61·6	29·841
Tuesday	Nothing was shown throughout the day.	0·00	230	Calm.	S.W.	— 0·9	51·5	59·6	29·910
Wednesday	Nothing was shown throughout the day.	0·05	80	N.	N.W.	— 2·6	46·1	58·0	29·960
Thursday	Positive, and tension moderate between noon and 3 p.m.	0·00	85	N.W.	N.W.	— 7·1	44·5	52·5	30·013
Friday	Positive, and tension strong during the afternoon.	0·00	40	Calm.	Calm.	— 7·5	44·6	53·0	30·114
Saturday	Positive, and tension variable during the afternoon and at night.	0·00	70	Calm and S.W.	Calm.	— 6·6	46·6	53·6	30·176
Means		SUM 0·14	SUM 1070	S.W. & N.W.		— 3·5	48·4	56·9	29·979

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

*** Back Numbers of the Old Series can still be supplied.

COMMUNICATIONS have been received from Mr. WALTER JESSOP, of Charing-cross Hospital; Mr. JORDAN, of King's College Hospital, Report of Cases; Mr. HAYNES WALTON, Fourteenth Lecture on Operative Ophthalmic Surgery; M.D.; SECRETARY of the GUTTA PERCHA COMPANY; Mr. BRAINSFORD, of Haverhill; Mr. TUCKER, of Berners-street, "Dr. Babington's Speech when he proposed the establishment of the Epidemiological Society at the General Meeting held at the Hanover-square Rooms, on the 30th of July;" Dr. PARKER, of the London Hospital, "Paper on Psychology, No. II.;" and Dr. LETHEBY, of the London Hospital, "Lecture XIX. on the Chemistry of the Poisons;" Dr. HUTCHINSON, of the Hospital for Consumption; A READER, Ross, Hereford, remarks on "Mr. Beale's Communication on Mental Acquirements in the Practice of Law and Physic; A CONSTANT READER; Mr. WALDRON BRADLEY, "Case of Poisoning by Oxalic Acid, with Remarks on the Alteration of Voice as a Consequence;" A MERE LICENTIATE, WHO HAS BEEN SIXTEEN YEARS IN GENERAL PRACTICE, "remarks on some Inconsistencies in the Arguments of the Council of the College of Surgeons;" A SUBSCRIBER "Queries concerning the Proposals of the College of Surgeons;" A SUBSCRIBER TO THE "MEDICAL TIMES" "Queries concerning the Abbreviation of Human Life after the Deluge;" Mr. MILTON, of Jewin-street, "Middlesex Hospital Report;" Mr. MILTON, of Jewin-street, "On Scalding in Gonorrhœa:" ENQUIRER "Queries concerning the Effect of Civilization in Diminishing Mortality;" Dr. DAVIES, Physician to the Bath United Hospital, "Remarks on a Case of Pericarditis" (Guy's Hospital Report for August 10); Mr. BURMAN, of Stratford-on-Avon, on "Malformation of the Urethra as a supposed Cause of Sterility;" M. R. C. S. E. and I.; Mr. RAWSON-SENIOR, of Batley; Mr. GOULD, of Hatherleigh, "Case of Placenta Prævia;" Mr. CAMPBEL, of Roxton, County Clare; A RETIRED PRACTITIONER; ONE WHO WOULD DESIRE TO BE EVEN PROFESSIONALLY A GENTLEMAN, Edinburgh; Mr. LILWALL, Secretary to the Early Closing Association, "On the Condition of Young Men engaged in Commercial Pursuits," (printed circular); the letters of a READER; Mr. T. WALDRON BRADLEY; a SENIOR GRADUATE IN MEDICINE.

THE following Publications have been received:—

Remarks on a Treatise on the Rectum. Anonymous. Pp. 8. Printed by Stevenson and Co., Edinburgh. (No date.)

Das Krampfhafte Asthma der Erwachsenen. Von Dr. J. Bergson, Pp. 149. Wordhausen. 1850. The Spasmodic Asthma of Adults. By Dr. J. Bergson. (A Prize Essay).

Eleventh Annual Announcement of the Baltimore College of Dental Surgery. Pp. 30. Baltimore. 1850.

A Practical Synopsis of Diseases of the Chest and Air-passages, with a Review of the Several Climates Recommended in these Affections. By James Bright, M.D. Pp. 271. London: John Churchill, and Thomas Hatchard. 1850.

Third Report of the Committee of the Convention of Poor-law Medical Officers. Aug., 1850.

Practical Suggestions for the Prevention of Consumption. By C. Calvert Holland, M.D., &c. &c. Pp. 143. London: Orr and Co. 1850.

Results of the Treatment of Fever in Glasgow Hospitals and Out-Door Practice Contrasted. By James Adams, M.D., Fellow of the Faculty of Physicians and Surgeons, Glasgow. Pp. 24. Edinburgh: Sutherland and Knox.

The Theory of Human Progression and Natural Probability of a Reign of Justice. Pp. 523. London: Johnstone and Hunter. 1850.

The Anatomy, Physiology, and Pathology of the Eye. By Henry Howard, M.R.C.S.L., Surgeon to the Montreal Eye and Ear Institution. Pp. 517. Montreal: Armour and Ramsay; London: Churchill. 1850.

Court Patronage and Professional Jealousy in England. Reprint from the American Journal and Library of Dental Science. Pp. 7.

Pharmaceutical Journal and Transactions. Edited by Jacob Bell. For September, 1850.

Monthly Journal of Medical Science. For September, 1850.

Mr. Paget's Lectures on Inflammation. Reprint from London Medical Gazette.

Suggestions Addressed to the Producers and Manufacturers of France. By M. Charles Dupin. Pp. 18. Translated and published by the Westminster Local Committee of the Exhibition of All Nations, 1851.

The Foot; its Pains and Penalties. By Lewis Durlacher, Surgeon-Chiropodist to the Queen. Pp. 147. Second Edition. Published by the Author. 1850.

Dictionnaire des Alterations et Falsifications des Substances Alimentaires, Medicamenteuses, et Commerciales; avec l'Indication des Moyens de les Reconnaitre. Vol I. Par. M. A. Chevallier, Professor a l'Ecole de Pharmacie, &c. Paris: Becket. 1850.

An Intending Emigrant.—We do not know the regulations for candidates for the medical department of the United States navy, but we are aware that English medical men have obtained commissions in it. We should hardly think there would be many vacancies, for rather more than a year ago there were what is called 37 waiting assistant-surgeons. Besides these there were 68 surgeons and 41 passed assistant-surgeons. We believe that medical officers are well treated in that service—as we hope they will be in our own by-and-by.

Mr. Simpson.—The Sewage Manure Company we believe was a failure. It certainly does appear strange that we should send vessels an immense distance to collect manure for agricultural purposes, when we are daily throwing away an equally valuable article. It being calculated that in London streets alone, upwards of 200,000 tons are ground into dust, the greater part of which serves no other purpose than to damage furniture and clothing.

Mr. Birch.—Thames water is notoriously bad. The Commissioners of the Board of Health are of opinion that the Thames water, taken near Hungerford-bridge, is unfit even for purposes of irrigation, on account of the quantity of animal and vegetable matter which it holds in a state of decomposition. The evaporation of this matter, they contend, and so do we, would be decidedly maleficent. Nevertheless, one of our Water Companies draws at least part of their supply from that quarter.

A Medical Missionary.—The Rev. C. Gutzlaff, some years ago, read a paper before the Royal Asiatic Society, on the present state of medical science in China, in which he stated, that according to the Chinese philosophers, diseases consist in five elements in a state of disturbance, their equilibrium constituting health. No physician is permitted to vary from the original mode of treatment. If he should do so, and the patient die, he is punishable for manslaughter. The practice of the healing art is therefore not unattended with danger, but it is probable that the changes effected by our success in arms in that part of the world may have thrown an ægis round European practitioners, several of whom, as also some American medical men, have already extended the benefits of science to the Chinese.

S.—The Poison Valley of Java does not owe its lethal properties to the fabled dangers of the upas tree, but to a considerable stratum of carbonic acid gas, as in the Grotta del Cane near Naples. The valley is said to be the crater of an extinguished volcano.

A Constant Reader, Aug. 20.—We have published all the papers on Spermatorrhœa which we have received from Mr. Macdougall.

M.D.—Many thanks. The first lesson a child learns is to speak. Plutarch says it were better he should be taught to hold his tongue. "We have two ears and but one tongue," says Demosthenes, "because it is better to listen than to speak."

A Subscriber.—We are quite at a loss to answer the question. We would however, refer our correspondent for some information upon the subject to Stackhouse's "History of the Bible," by Bishop Gleig. Burnet's "History of the Earth" may also be consulted, and Keill's "Examination of Burnet's Theory."

Mr. Tucker, of Berners-street.—With every wish to give our support to the Epidemiological Society, and to advertise its claims upon all suitable occasions; to give Mr. Tucker full credit for his exertions in founding the Society, and Dr. Babington the praise his excellent opening address so well deserves,—we yet cannot find room to repeat the latter *ad longam* in our pages. It will form a most suitable introduction to the first volume of the Society's Transactions.

D. D., Hull.—We believe the report is quite incorrect, that Professor Liebig is going to America, at least so we have been informed by one of his chief pupils.

X. Y. Z.—The Cholera is at present very rife in Denmark, so we fear our correspondent's theory is wrong.

A Retired Practitioner.—We cannot consent to half measures. To expose the system *in toto* we must soil our own fingers; to do so partially would be ridiculous. We thank, however, our Correspondent; his letter is only one of many similar we have received.

M. R. C. S. E. and I. is thanked for his kind attention. Our Irish correspondent had previously reported the occurrence.

Our Galway Correspondent was of the county, and not of the town.

Mr. Nunn's Drawings are in the hands of the engraver.

We regret that the crowded state of our correspondence obliges us this week not only to omit our usual Lecture, but letters from Durham, from Mr. Gould, of Hatherleigh; Mr. Burman, of Stratford-on-Avon; Dr. Davies, of Bath.

[To the Editor of the Medical Times.]

SIR,—Presuming that your remarks on "Inquirer's" letter in your number for August 17, are based on a misapprehension of the facts, I beg to state them again more unmistakeably.

The female first engages an accoucheur (No. 1), and then, taking fright, leaves her own home for that of her parents, and there places herself under the care of their medical attendant (No. 2). When she was really taken ill, this gentleman (No. 2) was unavoidably prevented from attending. A neighbouring practitioner (No. 3) had consequently to be sent for, to whom all the circumstances were fully explained. He, nevertheless, coolly appropriates the case to himself without any communication whatever with the medical man (No. 2) engaged to attend.

Now, such conduct may not be unprofessional, but it is undoubtedly ungentlemanlike; and, if the two are not synonymous they ought to be. A person who would act as No. 3 has done, may not be a thief, but he only lacks the opportunity to become one. Such are my views of the case,—such I have no doubt are yours also, and I should like to see them stated a little more broadly and unambiguously, the more especially that even in the North here, we have a few deserving of a lash for this and other disreputable practices.—I am, Sir, one who would desire to be, even professionally,

Edinburgh, August 27, 1850. A GENTLEMAN.

Dr. Rigby, Dr. Jenner, Dr. Sheridan Muspratt, Dr. Nicholas Barker, and Mr. Hunt, will receive proofs of their communications from our printer.

WE trust to be able to find room in the succeeding Number for communications from Mr. Campbell, late of the 55th Regiment, Mr. Dendy, Mr. Bateman, and Mr. Dobell.

ORIGINAL LECTURES.

LECTURES
ON
BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE VI.

The Debility of Tuberculosis continued.—Diminished Vital Capacity of the Chest a sign of this Debility.—Measured by the Spirometer.—Dr. Hutchinson's Table of the Vital Capacity.—The Relations of the Vital Capacity to the proportion of Blood Corpuscles—The change of matter in the system and the quantity of urea.—Debility and Perversion of the Natural Functions in Tuberculosis.—Dyspeptic symptoms not invariably present.—Their frequency.—Diminished power of sustaining the Animal Temperature as a sign of Tuberculosis.—The Febricula of Tuberculosis.—General considerations on the condition of the vital powers in this disease.—Aphorisms.

In my last lecture, the signs and symptoms of tuberculosis, as a disease of the blood, were brought under consideration. After describing the *anæmia*, *emaciation*, and the *debility* of the voluntary and involuntary muscular powers, the indications of this debility in the respiratory system were pointed out, and the various methods which have been proposed to determine the vital capacity of the chest were alluded to, particularly Dr. Sibson's proposal to employ a chest measurer.

We are indebted to Dr. Hutchinson for a still more direct method of measuring the vital capacity of the chest in health and disease. This consists in determining the quantity of air expelled from the lungs by means of an instrument called a *spirometer*.

The largest quantity of air which an individual can breathe into and from his chest on a forced inspiration and expiration, is called by Dr. Hutchinson the vital capacity; and in this sense I use the expression throughout these lectures. The quantity is always the same for the individual in health, but differs in males, females, adults, and children, and is also modified by weight, age, height, and, as already remarked, by other circumstances.

Weight increases the vital capacity about one inch to the pound from 105lbs. to 155lbs., but above 155lbs. the weight of the individual prevents the increasing progression; that is to say, it diminishes the vital capacity from the mere circumstance of fat preventing the mobility of the thoracic parietes. Age does not affect the vital capacity so much as height. From 15 to 35 years it increases, and from 35 to 65 years it decreases, by age.

The vital capacity has a remarkably fixed relation to the height of the individual. For every inch of stature, from 5 feet to 6 feet, for instance, the quantity of air which an individual is capable of receiving into and expelling from his chest after a forced expiration, followed by a forced inspiration, eight additional cubic inches at 60° Fah. must be allowed. This may be called Hutchinson's law. No adequate explanation of it has at present been given. This vital capacity bears no relation to the size of the chest, either in depth or circumference, but is a measure of, and may be measured by, the mobility of the thoracic and abdominal parietes. An individual from 5 feet to 6 feet high, between 15 and 55 years of age, will inspire from 174 to 262 cubic inches, in an ascending scale, according to his height and age. The spirometer, by which this is measured, detects any disease which impedes the movements of the chest, so as to diminish the amount of air expired; and, according to numerous observations made by Dr. Hutchinson, whenever the quantity is 16 *per cent.* deficient there is reason to suspect some local affection of the chest or abdomen. In the first stage of phthisis an average deficiency of 33 per cent. is observed in the vital capacity of the lungs, as measured by this standard; and, as the lungs become more completely diseased, their capacity may be reduced as much as 55 per cent.

The following is the table of comparison constructed by Dr. Hutchinson:—

Table of the Vital Capacity,
AT 60° FAH., FROM 4800 CASES.

Height.	In Health.			Suspicious Cases.	Phthisis Pulmonalis.		
	Age 15 to 55.	Age 55 to 65.	Age 65 to 75.	16 per cent. Deficient.	1st Stage. 33 per cent.	2nd Stage. 53 per cent.	Mixed 43 per cent.
ft. in. ft. in.							
5 ,, 0 to 5 ,, 1	174	163	161	146	117	82	99
5 ,, 1 ... 5 ,, 2	182	173	168	153	122	86	102
5 ,, 2 ... 5 ,, 3	190	181	175	160	127	89	108
5 ,, 3 ... 5 ,, 4	198	188	182	166	133	93	113
5 ,, 4 ... 5 ,, 5	206	196	190	173	138	97	117
5 ,, 5 ... 5 ,, 6	214	203	197	180	143	100	122
5 ,, 6 ... 5 ,, 7	222	211	204	187	149	104	127
5 ,, 7 ... 5 ,, 8	230	219	212	193	154	108	131
5 ,, 8 ... 5 ,, 9	238	226	219	200	159	112	136
5 ,, 9 ... 5 ,, 10	246	234	226	207	165	116	140
5 ,, 10 ... 5 ,, 11	254	242	234	213	170	119	145
5 ,, 11 ... 6 ,, 0	262	249	241	220	176	123	149

Thus, if a man be 5ft. 8in. and under 55 years of age, he should breathe out 230 cubic inches of air at the temperature of 60° Fah.; if 5ft. 9in., 8 cubic inches more, and so on.

The first column is gathered from observation, and is most to be depended upon; the two following columns are derived from calculation.

I have introduced Dr. Hutchinson's table because it is the standard to which I propose to refer in all remarks relating to the vital capacity throughout these lectures. It will now be understood that I admit a diminished vital capacity of the lungs as one of the diagnostic signs of tuberculosis. From the table we learn that there is a range of 16 per cent. below the physiological standard of the vital capacity of the lungs, as measured by the mobility of the chest and the quantity of air respired in a forced respiration, in which tubercles either do not exist, or their existence is doubtful. I believe that in many of these cases tubercles *do not exist;* and that there is a range of diminished breathing power short of 16 per cent., and extending frequently beyond 16 per cent., which is a range of uncomplicated tuberculosis; and may be regarded as symptomatic of that debility and malnutrition which belong to a tubercular condition of the blood. In illustration of this, as well as of several other points contained in this lecture, I could not furnish a better example than that so often referred to by Dr. Hutchinson himself, which I here quote from this gentleman's profound and philosophical article lately published in the "Cyclopædia of Practical Anatomy."

"The effect of this disease upon the vital capacity in the case of Freeman was very remarkable. This man came from America, in 1842, 'trained for a *prize fight.*' He was examined when in his '*best condition,*' and his vital capacity measured 434 cubic inches (temp. 60°); height, 6 feet 11¾ inches; weight, 19 stone 5 lbs.; circumference of the chest, 47 inches; inspiratory power, 5·0 inches; expiratory power, 6·5 inches. Freeman fought his battle, and for the subsequent two years lived a rambling and dissolute life. In November, 1844, exactly two years afterwards, he came to town in ill health. At this time *there was no auscultatory evidence of phthisis pulmonalis;* but the following *difference* appeared in his *vital capacity-volume.*"

	Vital Capacity.	Weight.		Inspiratory Power.	Expiratory Power.
	Cubic In.	st.	lbs.	Inches.	Inches.
November, 1842.....	434	19	5	5·0	6·5
Ditto 1844.....	390	17	5	4.0	5 0
December, 1844.....	360	16	0	3·5	4·0
Ditto	320	15	5	...	...

Dr. Hutchinson's investigations have been made almost exclusively on males; and, although there can be no doubt that the vital capacity of females is less than that of males, we are not in possession of any accurate data by which to calculate the difference. M. Bourgery affirms, from observations made on seventy individuals, that the vital capacity of females is only half that of males.(a) I am certain, from my own observations on adults in this metropolis, that the difference is much less. Allowing for height, age, and weight, and omitting all questionable cases as respects the existence of disease, in a large number of females in my own circle of practice, the difference is certainly not more than 25 per cent.

The deficiencies of the science of this highly important but intricate subject must be obvious to all. To render these observations complete, we ought to be apprised of the amount of carbonic acid exhaled and oxygen consumed in tuberculosis. No experiments have been recorded to determine this, although they would be more easily effected than after local disease has set in. Mr. Ure has favoured me with the following memorandum. "The only recent experiments with regard to the respiration in phthisical subjects are by Professor Scharling, of Copenhagen. The experiments were made in the forenoon, and commonly repeated twice with each patient, the apparatus being thoroughly aired in the interval. Out of six phthisical patients, five expired less carbonic acid than healthy individuals of the same age and sex. The experiment with the sixth did not show any sensible diminution." (b) So far as it appears, these experiments are favourable to my general views as relates to the signs and symptoms of tuberculosis as a disease of the blood.

The diminished vital capacity of the lungs in uncomplicated tuberculosis is, I am inclined to believe, in direct relation to the diminished number of blood corpuscles in the blood. This subject has not been adverted to by any physiologist quoted, but the following considerations are important. The proportion of blood corpuscles in the blood of females, as compared with that of males, is, according to Le Canu (c) 25 per cent. lower. Some other physiologists make the difference less. From my own observation, I conclude that the diminution of vital capacity in females, as compared with males, in health, is 25 per cent. or less. Hence, the difference of breathing power in the two sexes, in health, would appear to be in a direct ratio with the difference in the proportion of blood corpuscles in the two sexes. The same relation appears to exist in disease. I shall have to show, as we proceed, that in uncomplicated tuberculosis there is also a diminished proportion of urea in the urine, and we have seen that there is a diminished amount of metamorphosis in the tissues generally. Thus, we have a quadruple relation as respects the proportion of red corpuscles—the vital capacity—the nutrition of the tissues—the excretion of animal matter. This state of the animal economy has again to be regarded in reference to the pulse; for here we find a correspondence between the diminished number of red corpuscles, and the defective vital capacity of the lungs, and the diminished power of the heart and weakness of pulse.

The function of the lungs, so far as oxygenation is concerned; that is to say, the mutual action of blood and air in the blood brought into contact with the air in the lungs, appears to be completely performed in tuberculosis. Even in tuberculosis pulmonalis, when a large proportion of the lungs have become impervious to air, as remarked by Dr. Young, the lungs do actually perform this part of their functions sufficiently well; since, when the patient is made to respire oxygen gas, the symptoms are not relieved by the greater supply of oxygen. But, the reciprocal action between chyle and air, for the conversion of the former into blood, if it be admitted that this takes place in the lungs, must be the part of the function of these organs which is defective. Hence, healthy liquor sanguinis is not elaborated, the consequence being defective nutrition both of the corpuscles of the blood and the solid structures of the system.

I may repeat, that I here throughout regard tuberculosis as antecedent to and apart from the organic diseases of the lungs, mesentery, brain, or other parts, which in the vast majority of cases ultimately supervene. But, as respects the chest, the relations above enumerated may have very important bearings. If a tuberculous state of the blood, with a progressively increasing diminution of corpuscles, is attended with a diminished breathing capacity, the indisputable principle laid down, that the parietes of the chest are adapted with geometrical precision to the bulk of its contents, would lead to the inference, that this diseased state of the blood promotes a gradual contraction of the chest. While, on the one hand, it may be shown, that the contraction of the chest tends to the aggravation of the blood disease, and more especially, perhaps, to the deposition of tubercles in the lungs, on the other hand it would appear, that, as the disease of the blood advances, its special condition co-operates with the debility of the moving apparatus in occasioning the chest to fall in, its motions to become contracted, and the shoulders to curve forwards—circumstances which have been so frequently observed in incipient phthisis.

In all cases, where any of the signs of tuberculosis exist, it should be the special object of the practitioner to detect early the smaller variations in the vital capacity of the chest; and as it will be shown, that after a diminution of this function occurs, and before local disease has set in, it is not only possible, but comparatively easy to restore the function to its normal condition, the importance of attending to this precept will be readily understood.

d. Debility and Perversion of the Natural Functions. — In a constitution already predisposed, those aberrations and defects of the processes of digestion described as constituting so frequent and so prominent a characteristic of the predisposition become more severe. From a habitual inconvenience or peculiarity, they assume the form and intensity of active disease. These symptoms, which are of precisely the same nature, and indicative of the same pathological condition of the blood in disease as in the mere predisposition, viz., malsecretion from tuberculous blood of the fluids essential to digestion, when grouped together, are generally described as "strumous dyspepsia."(a) They occur most especially in children when affected with tuberculosis tending to the development of scrofula, and in this sense the digestive organs may frequently be regarded as the primary seat of the local outbreak. The dyspeptic symptoms are sometimes present without the anæmia, emaciation, or muscular debility in any remarkable degree, and have, in consequence, been regarded as primary, and even as the cause of the disease of the blood; but the converse takes place, and the whole of these symptoms too frequently occur together to leave any doubt that they depend upon, and are diagnostic of, one and the same disease. Even when most predominant, on careful examination of the subjects of these symptoms, there is always sufficient evidence from many of the structural and functional characteristics present, of the pre-existence of the disease of the blood. They are, as already detailed, extremely numerous and variable, but apt to be very differently combined in different cases. There is only one point of agreement for every group met with in practice, whether in the child or in the adult,—that they are all equally referrible to one cause, and rationally explained by that cause,—the special disease of the blood constituting tuberculosis. The morbid blood, and the anæmic and atrophied condition of the secreting tissues, furnish secretions inadequate for the due and complete performance of the digestive functions. Thus, in the autopsy of scrofulous subjects, Le Pelletier, Bordeu, and Garrod(b) found the bile almost invariably more pale, less consistent, less charged with resin and colouring matter than in the ordinary state, and this was undoubtedly dependent upon the general disease, and not the particular form of it. This state of the bile, and the morbid characters of the mucous and gastric juices, as described in a former lecture, explain the character of the evacuations and the nature of the symptoms, and show their dependence on the state of the blood, and that they are symptomatic of the general disease. The dyspeptic symptoms are, then, symptomatic of tuberculosis, since they are most frequently associated with the general anæmia, emaciation, and debility which characterise the general disease, and in the first place anticipate, and afterwards attend, the local complications, as glandular swellings, abscesses, diseases of the bones, the deposition of tubercle, and the like, although in some cases, from their long persistence, without any other local manifestation, they

(a) "Archives Générales," 1843, tom. i., p. 375.
(b) "Annalen der Chemie und Pharmacie," 1846, p. 23.
(c) Etudes Chem. sur le Surg., p. 66.

(a) Dr. Todd, Cycl. of Prac. Med., Vol. II. p. 654.
(b) Lib. Cit. p. 120.

may be regarded as a distinct affection or variety grafted on the idiopathic blood affection.

When the habitual dyspepsia of the tuberculous predisposition becomes symptomatic of the blood disease, especially in children, the loss of appetite without sufficient cause, or the ravenous appetite, is so much aggravated as to excite attention. The habitual irregularity of the bowels and morbid condition of the alimentary secretions pass into diarrhœa, or are attended with colicy pains, so as to become the subject of medical treatment. The usual white film is replaced or complicated by the tongue becoming redder than natural, or its anterior portion is dotted with red spots, or with projecting papillæ, or covered with a mucous fur, through which the red spots appear, or the fur is distributed in small, circular, white patches, more or less confluent, presenting a dappled appearance; many of these appearances indicating that inflammation or irritation of the alimentary tunics has supervened. Sometimes the tongue becomes dry and of a brownish colour, indicating that the stomach especially is affected. Although these dyspeptic symptoms are rarely altogether absent where the blood is in a high degree tuberculous, and especially in children, yet they are liable to exacerbations from various, and sometimes very trifling, causes, as irregularities of diet, the action of cold, the diseases incident to childhood, mental emotions, active passions, and the like.

When tuberculosis is either acquired, or occurs more suddenly on a latent predisposition, these dyspeptic symptoms are equally met with, as, for instance, in the cases which develope themselves after eruptive and other fevers, especially in children. But in the adult they are sometimes absent. The appetite often continues good; the usual quantity of food is taken; the tongue is little or not at all furred, notwithstanding the presence of the languor, debility, tendency to fatigue, and insidious emaciation already described. In these cases the organisation of the stomach and alimentary canal appears to have been but little affected during the predisposition, and primary digestion is comparatively well performed, the appetite sometimes continuing till within a short period of the death of the patient from some local complication. In these cases the tuberculous blood appears to run into that stage which is attended with an immediate deposition of tubercle, without producing these functional disturbances in a marked degree. Commonly, in all cases where the tunics of the alimentary canal have suffered from the malnutrition, the digestive secretions are in a high degree depraved, and the appetite and digestion are bad. The secretions and excretions generally in tuberculosis correspond with the anæmia, emaciation, debility, and morbid condition of the digestion; and their unnatural condition is alike referrible to the diseased state of the blood. They are irregular and unequal, and frequently depraved, and for the most part, in the absence of fever, more aqueous than natural. With the tendency to scrofula in children the skin is sometimes dry and harsh, with occasional outbreaks of perspiration. In tuberculosis generally there is an undue degree of perspiration in the night, or more frequently as the morning advances; the individual experiences a degree of exhaustion and debility on first rising. The urine has been but little attended to; we have no physiological standard in tuberculosis as we have of the blood, in the different temperaments and states of the constitution, with which we can compare it, and much is left to be inferred from observation, and from the analyses extant, of the slighter scrofulous and tuberculous local affections. Becquerel and Rodier found, in scrofulous diseases without fever, two kinds of urine.(a) It was either anæmic, having a density of about 1010, with a tendency to decompose quickly, and become speedily alkaline, coinciding with much debility and exhaustion; or it was natural, with a mucous cloud occasionally present; uric acid in neither case depositing itself either spontaneously, or with the addition of nitric acid. Disse states, that, in scrofulous affections, phosphoric acid predominates, and sometimes occurs in grains of sand resembling crystals. Our own observations on the state of the urine, during a period of many years, confirm the inference which may be drawn from the analyses, that in tuberculosis it corresponds with, and is to a certain degree the measure of, the low vitality of the blood and tissues, the diminished molecular action and change of matter, the languid circulation, and the general debility; being anæmic, of low specific gravity, tending rapidly to alkalescence and putrescency, of low temperature, and, in proportion as the emaciation progresses, becoming, excepting as respects the urina potu, or proportion of water carried off, smaller in quantity, and containing a smaller proportion of solids, and particularly of urea and uric acid: but, in making observations on the urine the effects of febrile action must always be allowed for in this diseased condition of the blood, as at all times increase of density, colour, and acidity, with diminution of quantity, and the appearance of uric acid sediment, is the result of local disease, attended with fever; and the effect of the local disease on the urine, as of the local disease on the blood, has to be carefully discriminated from the morbid state of the urine symptomatic of the original disease of the blood.

(a) "Des Urines," p. 302.

When tuberculosis sets in as a disease, the catamenia frequently cease. Their cessation takes place suddenly and not gradually, as commonly happens in chlorosis, and this characteristic of the debility of the constitution, and symptom of the diseased condition of the blood, sometimes occurs very early, and is often considered by the patient as her only complaint.

DIMINUTION OF THE POWER OF SUSTAINING THE ANIMAL TEMPERATURE.

This, again, is one of the most constant symptoms of tuberculosis; and, if we regard the blood corpuscles, or the fibrine, or both, as the conveyers of oxygen from the lungs to the remote parts of the system, and oxygen as the supporter of vital heat, we readily understand how, in tuberculous subjects, the proportion of the corpuscles in the blood being diminished, and the circulation languid, the absolute heat of the body is diminished.

Believing, as I do, that the heat of animals is developed mainly in the blood itself, and physiology having clearly indicated that the red corpuscles are intimately concerned in the fixation of the oxygen from the atmosphere, so as to sustain the temperature of the blood at 98°, or thereabouts, we can readily understand that a diminution of corpuscles must be attended with a diminution of the power by which this result is produced, unless some compensating agency were brought into play. The only compensating circumstances we can conceive are, either an increased velocity of circulation, and more rapid and repeated change of matter in the blood,—which does not take place, as we have a languid circulation in tuberculosis,—or a diminished expenditure of caloric. But the tuberculous are placed under similar circumstances of external temperature as the healthy, —they are subjected to the direct agency of cold, evaporation, the disintegration of tissues, and the like. Hence the blood, although sustaining the necessary degree of heat, by the resources of nature or by the applications of art, has a constant tendency to reduction of temperature, and the tuberculous are morbidly susceptible of the agency of cold. This is almost identical with the more general condition of a diminished vitality of the blood. It is a necessary consequence of the defective state of the blood, as respects its corpuscles, and the smallness of the respiratory functions. There exists, in tuberculous subjects, a low power of producing heat; hence such subjects are remarkably sensitive of the effects both of heat and cold. The effect of cold on the system is shown by a great tendency to turn pale under its influence, with lividity of the lips and roots of the nails, and a disposition to coldness of the extremities of the nose, hands, and feet. Although this is a symptom of the general disease, and even of the habit or predisposition, and accompanies all the varieties of the local disease, it is most especially characteristic of those cases which tend to terminate in abdominal tuberculosis. On the other hand, the tuberculous are greatly inconvenienced by undue external warmth, the muscular feebleness of the respiratory organs, and the constrained respiration, induce a degree of oppression, and the instability of the balancing powers of heat and cold in the blood and vital structures renders the subjects of tuberculosis extremely susceptible of even slight changes of external temperature. As illustrating the diminished heat-producing power, not only while tuberculosis remains uncomplicated with local disease, but after local disease has set in, in very inflamed scrofulous tumours the temperature is not higher than that of the general system in its febrile condition; and, when suppuration takes place, even this increase is not maintained. Becquerel and Breschet observed the temper-

ature of a wound in a young man with scrofulous caries in the foot, which reached only 89°—60° Fah. (a)

FEBRICULA.

Although in the earlier stages, and in the more insidious forms of tuberculosis, fever is by no means a necessary or even a frequent concomitant, and the diseased blood may produce a gradual atrophy of the tissues, and proceed to a considerable extent without any febrile disturbance in the system, still, whenever a tuberculous state of the blood exists, fever is easily excited. Slight excitants, derived from without, or originating in the blood from a suppression of secretion or excretion, or absorbed from the tissues during the disintegrating processes, which, in a vigorous state of the blood, are rapidly eliminated or destroyed, will excite fever in the subjects of this disease of the blood. Independently of this, as an accidental or occasional occurrence, a continual slow fever is liable to set in as the malnutrition progresses. It is not the hectic fever, and, as remarked by several preceding writers, perhaps with little propriety called fever; but a state of irritation, exhibited by symptoms, sometimes for a long time before the accession of cough, scrofulous swelling, ulceration, or any signs of local disease. It is attended with slight heat of skin, frequently excepting the extremities, which are colder than natural; slight thirst; a suppression of sensible perspiration, the surface being dry and harsh, except during sleep, when it is partially moist; the urine deposits a whitish sediment; and this form of febricula is frequently attended with those symptoms which constitute tuberculous dyspepsia; the breath being heated and fetid. This perpetual fever, no doubt, indicates the presence of something irritating the blood; it occurs most decidedly at the period when some of the special pathological results of tuberculosis, as hæmorrhage or the local deposit of tubercle, begin to manifest themselves; and, as there may be deposition of tubercle in particles, and a resorption of its analogue without any obvious aggregation of tubercle, it certainly becomes a question whether this fever is not frequently the result of an animal compound absorbed into the blood before tubercle developes itself as a deposit so as to produce local effects. This febricula is in direct relation with the vitiated condition of the liquor sanguinis. When it occurs simultaneously, or supervenes on the anæmia, emaciation, and debility, we may be quite sure that the case is verging upon the deposition of tubercle.

In this exposition of the signs and symptoms of tuberculosis, I think I have established that the anæmia, the emaciation, the debility, the symptoms furnished by the perversion of the natural functions of digestion, secretion, and excretion, and the diminished power of sustaining the animal temperature, may all be referred to that morbid condition of the blood, which I have exhibited in my first lecture, in the form of a diagram, and especially to that diminished vitality which I have described as its most general expression. I propose to terminate this section with some

GENERAL CONSIDERATIONS ON THE CONDITION OF THE VITAL POWERS IN TUBERCULOSIS.

The greater number of the symptoms enumerated are referrible to direct debility; but the malnutrition and consequent defect of organisation in the organs by which vital power is more obviously manifested, although unquestionably productive of its effect, must not be regarded as the fundamental source of that debility. We are thrown back upon the question, What is the cause of this malnutrition? The debility as manifested in the symptoms is a defect of vital power, taking its origin in the blood itself, antecedent to the malnutrition of the more solid structures. The diminished and depraved nutrition of the tissues indicates that there is some defect in the proximate or ultimate elements of the blood, and that the metamorphoses of nutritive material are less in number; that the change of matter in the solids is less vigorous, and that there is a primary diminution and depravation of the molecular actions in the blood. The diminished amount of change of matter in the blood, and in the cellular and muscular tissues, must, from the nature of things, be attended with a diminution of the *momentum of vital force*; and this, again, explains the waste which takes place from the beginning, first, in the red corpuscles of the blood, and, secondly, in the muscles and other tissues; the corpuscles and tissues deteriorated, deprived of vital power, broken up, and absorbed, exceeding the organic material assimilated. The degree in which this loss of momentum exists is measured by the waste of matter and the muscular debility. But the cause of the progressive debility is the progressive decrease of vital molecular changes, first in the blood, and secondly in the solids. Thus, the debility of tuberculosis indicates a *direct* loss of power; and the whole of the phenomena of the predisposition and the symptoms of the disease show—

1. That from the earliest invasion the sum of the vital force is either below the standard of health, or it is relatively low as respects the structure and organisation of the individual.

2. That this diminution in the sum of the vital force depends especially upon diminished vitality of the blood and of the cellular, gelatinous, and muscular tissues produced and nourished from an imperfect blastema derived from the diseased blood.

3. That, as tuberculosis advances, the sum of the vital force for the whole system continues to diminish; this loss of vital force being exhibited not only in the defective manifestation of voluntary and involuntary muscular power, but in the diminished resistance of the vital powers of the blood and of the cellular and muscular tissues to the change of matter in the animal body; hence, in tuberculous subjects, the rapid diminution of the red corpuscles of the blood, the deterioration of the vital qualities of the liquor sanguinis and of the blastema, the diminished plastic power of the cells, the low calorific power and the emaciation.

4. That frequently, but by no means universally, the nutritive powers of the blood, as respects the nervous tissue, remain undiminished in tuberculosis, the nervous tissue not requiring for its nutrition compound principles identical with it to be introduced into the blood with the food, and having a nutrition peculiar to itself, differing from that of the cellular and muscular tissues. Hence the diminution of vital force is not exhibited in the nervous system, but, as conductors of the vital force generated by the change of matter in the whole system, the nervous system remains intact. The particular condition of the vital force is, nevertheless, manifested through the nerves; hence activity and action without power, morbid irritability, &c. It is the highest manifestations of the vital force dependent upon nervous structure, as sensibility and psychical phenomena, which so frequently remain unaffected during the physical degeneration. These phenomena are frequently rather augmented than diminished, the nerves themselves being perfect in their structure, but more exposed from the waste of their cellular coverings; hence, frequently in tuberculous subjects increased sensibility to impressions; and this occurring in the predisposed from the earliest age, and throughout a series of years, an acuteness of intellect is frequently exhibited.

Such, according to my view of tuberculous and scrofulous affections, is tuberculosis, as an essential disease of the blood, to which man and the animals immediately beneath him in the zoological scale, are subject more or less, at all periods of life, from early embryotic development to old age and decrepitude. Many will regard the disease thus described as an abstraction; and it must be admitted, that, as it comes under the cognizance of the practitioner, it is rarely made the subject of his consideration and treatment until some local affection of a particular tissue or organ has proceeded so far as to complicate its symptoms; and still more rarely does it proceed to a fatal issue without some local affection having supervened. Nevertheless, throughout the progress of all the local diseases constituting varieties of tuberculosis, the symptoms and characteristics of the general affection may be recognised; it occasionally happens, that tuberculosis proceeds to the last stage of marasmus and a fatal issue without hæmoptysis, the aggregation of tubercle, or any obvious local affection in the adult. This is a more frequent occurrence in the early periods of life. It frequently happens, also, that some local affection—as tubercles in the lungs—supervenes, but of so circumscribed an extent, that it interferes little with the functions of the organ or the general symptoms of tubercuolsis or of the tuberculous predisposition, and from hygienic or other causes the general affection subsides, and nature renders inert the local mischief by a cretaceous formation or a fibrinous deposit. Occasionally the local affection is too trivial to compromise life, and yet the patient goes on dying of the general disease. This frequently happens in children, and sometimes in adults, as proved by symptoms before death, and the exist-

(a) Séance de l'Académie Royale, Aout 10, 1835.

ence of too circumscribed an organic affection, detected *post-mortem*, to account for the death; but the most frequent result is, that organic disease sets itself up, and complicates and very materially modifies and precipitates the symptoms, progress, and termination of the general affection.

The essential condition of the blood, upon which the signs and symptoms of tuberculosis depend, is still a problem. In fatal cases of the disease, one or more organs, as the lungs, the brain, the mesentery, and the intestines, have generally become so far diseased, as to be incompatible with the continuance of life. In forthcoming lectures, the special pathology will be fully considered, and we shall have to estimate the influence of the various organic affections over the original disease, and in the production of the usual fatal termination; but it may be here stated, that the diseased condition of the blood, the deterioration of the circulatory and more stationary fluids and solids, the emaciation and the failure of vital force, are of themselves, in this general disease, totally apart from any special affection of an organ, fully adequate to produce such a result, and there can be no doubt that, in many instances, death is as much the consequence and the natural termination of the general disease as of disease of any vital organ.

[To be continued.]

ORIGINAL COMMUNICATIONS.

ON DISPLACEMENT OF THE OVARY.

By EDWARD RIGBY, M.D., &c.;

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The case which I am about to offer to the notice of the readers of the *Medical Times*, is a striking illustration of the displacement of the ovary to which I alluded in my last, and points out the value of the prone position as a useful addition to our means of treatment.

Mrs. O. P., aged 29, married five years, one child.

May 10, 1849, middle size, active.

Intense agonising pain coming on in paroxysms at the right sacro-iliac synchondrosis, sometimes accompanied with a discharge of blood and pus from the bowel. Tongue rough and dry; little appetite; bowels tolerably regular; but their evacuation is always attended with severe pain, and sometimes, especially during the above-mentioned paroxysms, or on the approach of a catamenial period, with most excruciating suffering.

These attacks of pain occur about every fourteen days, viz., chiefly at the menstrual periods, and at the half-way time between them; the passage of fæces frequently causes the attack; after which the pain will continue of the most intense character for hours, or even until the next morning, when it will frequently subside quite suddenly. They have always been accompanied by the discharge of blood from the bowels above alluded to, which evidently relieves the pain.

She dates all her symptoms to the time of her pregnancy, during the last two or three months of which the pain first showed itself, and has continued increasingly since.

Examination per Vaginam.—Os uteri very flabby; uterus feels hard and enlarged; sound passes 3½ inches; the body and fundus are extremely tender to the touch; the latter is directed towards the right ilium.

The peculiar, intense, and unbearable pain, is situated in the direction of the right sacro-iliac synchondrosis.

Examination per Rectum.—The right ovary can be distinctly felt; it is intensely painful on the slightest pressure, and is evidently the centre of her severe sufferings.

On account of some private arrangements, nothing further was done until June 4, when six leeches were applied by a rectum tube to the right ovary.

June 6.—The introduction of the leeching-tube into the rectum produced considerable pain at the spot where the ovary can be felt. The leeches bled freely, after using an enema of warm water; severe pain came on afterwards, which lasted for two or three hours, and then suddenly abated, as is usually the case when she has a paroxysm. Pulse weak; tongue rough; bowels open.

℞ Acidi hydrochlor. dil., acidi nitrici dil., aa. aa. ʒi.; extract. taraxaci, ʒi.; infus. aurantii co., ad ʒviii.; ft. mist. cujus sumat cochl. magna ij. ter. die.

℞ Pil. Saponis c. opio, gr. x.; ft. suppositorium in vaginam, h. s. imponendum.

June 11.—Feels better. The passage of fæces produces less pain. No discharge from the rectum. Rep. mist.

℞ Sodæ potassio-tart., ʒi.—ʒiss. primo mane p. r. n.

June 19.—Leeches were again applied to the ovary a few days ago, and bled tolerably well afterwards, although very little blood came at first. She had a good deal of pain the next day, since which she has been very much easier: expects the catamenia in a few days. The right ovarian region (externally) is less tender, and the passage of fæces, for the last two mornings, has been much easier than usual. Tongue still rough; evacuations light coloured; urine still very thick.

℞ Pil. hydrarg., chloridi comp., extr. hyosc., aa. gr. v. o. n.

℞ Potassæ bicarb. ʒiv., potassæ nit. ʒji., sp. ætheris nit. ʒss., aqua menthæ pip. ʒvjiss. M. ft. mist. cujus sumat cochl. magn. ji. bis die post cibum.

June 25.—Looking and feeling better; has had very trifling pain since last report. Bowels more healthy; tongue still rough; catamenia appeared on the 19th without much pain; the discharge was scanty.

Examination per Anum.—The ovary is distinctly smaller; the pulsating vessels are evidently diminished in point of size; the whole of it is much less tender.

Six leeches were applied with very little pain, either at the moment or afterwards. They filled well. Rep. med.

August 8.—Leeches were again applied, but bled badly; after which she left town and went some distance into the country. By letter received to-day, I find that, beyond feeling much fatigued, she bore the journey very well; since which, however, she has made great exertions to attend a near relative who had been taken suddenly and dangerously ill, the consequence of which has been that she was seized, two days ago, with one of her severe paroxysms of pain when evacuating the bowels, during which she again passed some blood. The pain continued quite as bad yesterday when she wrote, but there had not been so much blood as before. She remarks that the pain does not seem so high up this time. Expects the catamenia about the 12th. I write that she must continue the saline mixture and pills last prescribed, and return to town as soon as the period is over.

August 27.—Having returned, leeches were applied per rectum on 24th, but they scarcely bled at all, and she had severe pain for twenty-four hours afterwards: is better now.

Rep. Mist. ℞. Sulphuris precip., magnes. carb., aa ʒss. M. ft. pulv. omni mane sumendus.

August 31.—Leeches were applied, per vaginam, to that spot which corresponded to the right ovary; they filled and bled well.

Rep. Mist. acidi nitro-mur. c. ext. taraxaci ex infuso gentianæ co.

Rep. pulv. sulphuris c. magnes.

Sept. 3.—She had no pain after the leeching, and has felt better since; she also looks better. Bowels open twice a day without any pain, although she is obliged to lie quite still for ten minutes afterwards. Tongue clearer. Has still pain of the right side.

Rep. med.; applicent hirudines per vaginam.

Sept. 11.—Leeches bled well, but was in severe pain afterwards, and was much exhausted. Tongue furred and rough; bowels open once.

Rep. mistura. ℞. Plumbi diacet.; pil. saponis c. opio, aa gr. x.; M. ft. suppositorium, h. s. utend.

Sept. 14.—Feels better, but still has the pain in the right iliac fossa; this pain comes on without any assignable cause; it is attended with a sensation of heat and burning. Tongue much better; no leucorrhœa.

Rep. mist. acidi nitro-mur. c. extr. taraxaci ex inf. gentianæ co. Rep. suppositorium.

Sept. 17.—The suppositories seem to have caused much pain, probably from her having introduced them awkwardly.

After long cross-questioning her as to her symptoms, I come to the conclusion, that it is not a case of *mere* inflammation of the right ovary, but of descent or prolapsus of it into the recto-vaginal pouch. The pain is very low down the rectum; it feels to her like a ball in the lowest part of the recto-vaginal pouch, and she finds relief from it by lying on her back, with the feet raised upon the arm of the sofa. Tongue very rough. Bowels well opened, but with pain. During the evacuation, she feels as if a body were violently

forced down against the rectum and obstructed it. Let her use the prone position.

℞ Pil. saponis c. opio gr. v., ft. suppositorium per anum.

Sept. 19th.—The opium seems to have affected her; the bowels have been confined since, and the stomach somewhat deranged, but she has had no pain beyond headache from the opiate. When she stands she feels as if a weight or substance were in the rectum. I refrained from examining lest I should bring on a fit of pain. Rep. omnia. Let her continue the prone position.

21st.—Bowels have been regularly opened, and *without pain*. Has had no pain except once, when, at my request, she tried the position of the knees and elbows, and the pain went off in less than five minutes; feels better; scarcely any leucorrhœa. Tongue much better; appetite better.

Rep. med. decoct. quercûs c. alumine.

Oct. 1st.—Has derived great relief from the position on the knees and elbows, having been able to stop the pain every time it came on. She is much better in general health; expects the catamenia in three or four days. Rep. med.

Oct. 4th.—Is now staying with a relative at a considerable distance from her former residence. Her journey produced a slight attack of pain, which she relieved by going upon her knees and elbows. In about a minute she has the sensation of something at the back of the pelvis, and somewhat at the right, beginning to move. She says, "it was as if something which was painful went away, and ceased to produce pressure there." Tongue still rough and dry; bowels open; sleeps well; appetite moderate; has ceased to use the suppository of pil. saponis c. opio. Rep. mist. acidi nitro-mur. c. taraxaci ex infuso gentianæ c., ter die. Rep. sodæ potassio-tart., primo mane.

Oct. 6th.—Has had much pain during the night. It was only relieved for a few minutes at a time, so that she was obliged for some while to be constantly upon her knees and elbows. She feels convinced that she has thus succeeded in keeping off a very severe attack of pain. Tongue much better; bowels more regular; feels much better. Rep.

Oct. 18.—Returned to her home in the country, and did not suffer pain from her journey; she has been free from pain a whole week, but has, nevertheless, persevered in using the prone position.

Nov. 27.—The last period but one came on a week before the time; the one which is just over was only two days too soon. In the former one, the pain came on the day after the discharge commenced, and was most intolerable; it appears to have been in great measure connected with the passage of a hard mass of fæculent matter which pressed severely upon the inflamed ovary. The prone position was the only posture in which she could lie during the attack of pain.

℞ Pil. hydrarg., gr. v. alternis noctibus.

℞ Pulv. guaiaci, magnesiæ carb., aa gr. x. M. ft. Pulvis omni mane sumendus.

Dec. 12.—She writes in good spirits; has had no pain for nearly a fortnight; was much relieved by the blue pill and powders.

Dec. 26.—Continues better. Has passed the catamenial period without pain, except on the first day for an hour or two, and this was brought on when the bowels were relieved, at which time the pain was very sharp, and some blood passed from the bowels, although they were not at all confined; the prone position, however, removed the pain, nor has it returned since.

Feb. 4, 1850.—Says that she is now quite a stranger to the pain, and has passed the last two periods with only a slight approach to it on one occasion.

April 10.—Going on very favourably.

In offering some remarks on this interesting case, it is right to acknowledge, that until the 17th of September I had considered it merely as a case of oophoritis, and had not recognised the fact that the ovary was displaced. The intense severity of the pain; its being increased by the evacuation of the bowels, especially at the catamenial periods; the being able to feel the right ovary with great distinctness per rectum, and the appearance of the menstrual discharge, which consisted of little else than fibrinous exudations, plainly pointed out the existence of oophoritis; and I attributed the ease with which I could reach the inflamed ovary to the circumstance of its being swollen from the state of great congestion in which it evidently was; the symptoms of inflammation were so prominent as to make me overlook the fact of the pain occasionally subsiding suddenly; still, however, at moments of greatest ease, the intense suffering produced by the passage of solid fæces down the rectum, or by the pressure of the finger, showed that inflammatory action was constantly present to a considerable extent, nor did the evidence of prolapsed ovary show itself with any degree of distinctness until the inflammation of the organ had been in some degree controlled. Indeed, the sudden subsidence of an attack of pain, is not a proof that the ovary which had been forced down had now regained its natural position, as the mere pressure of a loaded portion of intestine might easily have induced a paroxysm which would cease when the pressure was removed. Still, however, there can be but little doubt that on many occasions the sudden subsidence of pain was owing, in great measure, to the ovary being no longer forced down by superincumbent pressure, and returning to its natural position. The action of the leeches is worth notice. I believe I have shown, on a former occasion, that the leeching tube will be best guided to the right spot in the rectum by the patient's feeling. It is as well to make a short examination per rectum with the finger first, the bowel having previously been well washed out by an injection of warm water. By this means a more accurate knowledge is gained of the direction in which the tube is to be introduced, and the patient will instantly say when it reaches the spot which is so peculiarly tender. In a case like the one before us it could hardly be expected that the tube could be held for some time in contact with the tender spot without producing much pain, and not unfrequently the very bites of the leeches produce considerable irritation for some time afterwards. I therefore ordered the suppository of pil. saponis c. opio, to prevent this as far as possible; the leeches evidently relieved her; she felt better; the passage of fæces produced less pain, and the discharge from the rectum ceased. The alterative tonic agreed well, and I directed her to keep the bowels in a lax state by the sodæ potassio tart. The second application of leeches produced more pain and irritation at first, but still greater relief afterwards. Not only was the passage of fæces attended with much less pain, but pressure externally on the right ovarian region would be borne much better. I now altered the medicines, for the liver was inactive, the urine loaded, and the tongue, besides its ordinary rough surface, the result of irritation, was covered at the back with a thick fur. 5 grains of Plummer's pill were therefore given every night, and an alkaline saline during the day.

In August she produced a severe relapse by over-exertion and long standing. The only difference was, that the pain this time felt lower down in the pelvis than hitherto, which I presume arose from the swelling of the ovary having been diminished by the previous leeching, so that the gland, on exerting herself, had descended lower down into the recto-vaginal pouch than usual. Still, however, I did not recognise at the time anything more than inflammation of the right ovary. Leeches were applied on the 24th, and again on the 31st, when they bled well, with great relief. The pain ceased; it was not brought on by action of the bowels. The tongue improved considerably, and she felt better; still, however, some cause seemed to exist which kept up inflammatory action, and brought back pain; and although she had to a certain extent been evidently relieved by the leeches, still there seemed to be a point beyond which they merely weakened without relieving her. The situation of the pain being evidently lower in the pelvis than before, struck me forcibly, and, on closely questioning her as to the sensation it produced, she described it as a ball low down the rectum, which, during evacuation of the bowels, seemed to obstruct the rectum, and was violently forced down by the effort. Besides this evidence in favour of prolapsed ovary, I may also add the relief which she felt by putting her feet upon the arm of the sofa, thus to a certain amount raising the pelvis higher than the trunk, and thereby diminishing the pressure of the intestines &c. upon the pelvic viscera, and favouring the ascent of any organ which had descended lower than natural. Although I have omitted to mention when she commenced the use of the prone couch, there is no doubt that she did so immediately after my coming to the conviction that the ovary was displaced, and the report on the 21st of Sept., (just a week afterwards,) shows that very decided relief had been gained. Her general health was much improved; the tongue was fast losing the peculiar dry short-napped fur which is so constantly seen where uterine irritation exists. The bowels were moved without pain, and she

had had no paroxysm of suffering except once, and this was but for five minutes, (when she put herself on her knees and elbows at my request,) and which was probably owing to some slight and temporary pressure which the ovary experienced as it ascended into its natural situation on her assuming this position.

In about ten days more the relief gained was still more striking, partly from the occasional use of the knees and elbows position, and partly also from her getting more accustomed to the prone position, and being able to use it more effectually. She, moreover, now began to find that she could stop the pain by this simple means whenever it came on. Nothing can prove more distinctly that this position has a direct effect in removing the cause of her dreadful sufferings than her own description of her sensations when upon the knees and elbows during an attack of pain:—"It is as if something which was painful went away, and ceased to produce pressure there." The struggle which she had to ward off an attack of pain during the night of October 5 is also interesting.

The ups and downs in the treatment of such a case are equally valuable. Thus, after having spent some time unusually free from pain, she had an attack of great intensity just before a catamenial period, where the ovary (always more irritable at these times) was forced down, and pressed upon by a large mass of fæculent matter passing down the rectum, and she felt that she could be in no other posture except the prone position whilst the paroxysm lasted.

I have already exceeded my usual limits so far, that I will not venture on any further remarks for the present, hoping shortly to renew the subject with one or two more cases of the same sort.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

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[Continued from page 249.]

NINTH PAPER.

TYPHOID FEVER.

HÆMORRHAGE FROM THE BOWELS CONTINUED.

The eighth paper contained the records of two cases of typhoid fever, in both of which blood escaped from the bowels, the one case proved fatal from the direct loss of blood; the fatal termination in the other was probably caused indirectly by the hæmorrhage. I shall now detail the particulars of a case, in which, although the quantity of blood lost was pretty considerable, yet the patient did well.

Case 29.—In a man, 35 years of age, after five months residence in London—depression of spirits—cold chills—headache—loss of strength—violent delirium—a want of sleep—eruption of rose spots—diarrhœa—hæmorrhage from the bowels—convalescence between the 20th and 30th day of disease.

James S., an ostler, aged 35, of temperate habits, was admitted, Saturday, July 20, 1850, into the London Fever Hospital, under the care of Dr. Tweedie. James S. was a thin man, with fair skin and red hair. His friends stated that he had always enjoyed health till his present attack; that six months before entering the hospital he left Cumberland to reside in London. About a month before his present illness he lost a sum of money; this loss caused him much depression of spirits. On the Tuesday preceding his entrance into the hospital he was seized with cold chills and headache. He took to his bed directly. His bowels were confined till after the administration of aperients. On the following night, Wednesday, July 17th, he became violently delirious; he was restrained in bed with some difficulty. Whether James S. had experienced any symptoms of illness before the day he took to his bed it was impossible to ascertain, in consequence of his previous state of mental depression.

On the 21st I made the following notes:—"Is reported to have slept well; no headache; mind confused and wandering; expression natural; complexion clear; colour of cheeks natural; no flush; no injection of conjunctivæ; no dislike to light; pupils normal; on the temples are the marks of eight or ten leech bites.

He leaves his bed unassisted, but with considerable difficulty; tongue moist, anterior half red, posterior half slightly furred; no stool; no gurgling, tenderness, nor abnormal fulness of the abdomen; no thirst; no appetite. Pulse, 108 soft; respiration quiet; cough trifling; skin warm, dry, and clear."

During the night he was delirious, and while so left his bed with the intention of dressing. Slept but little. On the following day he passed one relaxed stool; gurgling was observed in the iliac fossa, and his tongue was dry and glazed. On the 23rd there was little change; but on the 24th of July his mind was in its natural state. All delirium and confusion of intellect had disappeared; his pulse was only 72; a few imperfectly marked rose spots were observed on the abdomen and thorax: he passed two stools. On the morning of the 25th there was little change, excepting that the bowels were more relaxed; five stools had been passed the preceding twenty-four hours.

July 26th, the following notes were made:—"Tongue dry, glazed, and tremulous. The nurse states that yesterday afternoon after the visit he had two copious evacuations from the bowels of pure blood. He has passed two stools to-day, and in both are clots of blood—the abdomen is slightly concave, there is neither tenderness nor gurgling in the abdomen—the rose spots noted on the abdomen are now well marked—the skin is hot and dry—the pulse is 80, soft."

On the next day, July 27, the tongue became moist, and there was for the first time a little appetite; his mind was normal in all respects; the stools, one and two respectively, on this and the following day, were relaxed and very dark. On the 29th and 30th the bowels were confined. On the 31st he passed one copious relaxed stool; an emollient glister was administered in the evening of the same day, and two drachms of castor-oil on the morning of the 1st of August, but no stool was passed on the latter day. After this, however, his bowels acted daily by means of a small dose of castor-oil administered every morning. On the 28th of July two fresh rose spots were observed on the abdomen. On the 29th of July two new rose spots were again noted, and on the 31st several fresh. At this time the pulse was only 76, and he was gaining strength. On August 4th, *i.e.*, probably between the twentieth and thirtieth day of disease, when the last note of the case was made, his pulse was only 64—his appetite was good—tongue nearly clear—his bowels had acted twice the preceding twenty-four hours, the stools being formed, and natural in appearance. It was noted that he had evidently lost much flesh since his admission, and also that a blister applied to the nape of his neck before he came under observation, had not healed: he was gaining strength daily. He left the hospital August 10.

Experience has proved, that those who have only recently taken up their abode in large cities are particularly liable to be attacked with typhoid fever. James S.'s case illustrates this fact. The exact date at which his illness began could not be fixed. The depression of spirits under which he had laboured for a month before he took to his bed, not only rendered him more susceptible to the influence which excites the disease, be it contagious or not, but also prevented his friends appreciating that change in his appearance which, had he been in his ordinary mental state, would doubtless have been obvious. He was delirious at the time he was first seen by a medical man, so that no history of his past state could be obtained from the patient himself. The cessation of the delirium at the moment of the appearance of the eruption is a fact worthy of remark, especially when taken in conjunction with a like fact concerning a case hereafter to be recorded. The loss of blood from the bowels could not have been the cause of the improvement in the mental state, inasmuch as that improvement was manifested on the 24th, and the escape of blood from the intestine did not take place till the afternoon of the 25th. The rose spots ran that course which is natural to them. The points, however, on which I wish the reader to fix his attention, as illustrated by this case, are—1st. The recovery of the patient in spite of the copious hæmorrhage from the bowel; 2nd. The cessation of the violent delirium consentaneously with the eruption of the rose spots; 3rd. The repeated eruption of

fresh rose spots after the patient appeared in other respects convalescent. I shall refer to the last point, when speaking of the *duration* of typhoid fever. The raw surface left by the blister applied to the neck, before James S.'s admission, was not healed a fortnight after. The tendency in blistered surfaces to ulcerate, in patients affected with typhoid fever, was pointed out by Louis. I have before adverted to it.

SCARLET RASH.

A delicate scarlet tint of the whole surface of the cutis is now and then seen to precede for two or three days the eruption of the diagnostic rose spots. In such cases the disease may at first simulate scarlet fever, as in the following:—

Case 30.—A man aged 19 years—pain in the abdomen—diarrhœa—rigors—headache—sore throat, followed by scarlet rash—subsequently rose spots—moderately quick pulse—sonorous râle—dry brown tongue—delirium—extreme prostration—somnolence—convulsions—their general improvement—deafness—convalescence.

Robert P., aged 19, a cellarman, of very temperate habits, dark brown hair and eyes—strong made—moderately stout—was admitted into the London Fever Hospital, July 12th, 1849. He stated that his general health had before his present illness been good—that in 1844 he had an attack of "fever." His mother died in a "mad-house." About a fortnight before his present illness began he had a slight attack of diarrhœa. It disappeared in a few days. On Sunday evening, July 8th, he was seized with pain in the abdomen and diarrhœa. He had slight rigors the same evening—the rigors were repeated several times before his admission into the hospital; sore throat and headache were among the earliest symptoms. There was no vomiting nor nausea. Although, from the first, he lay about on the straw in the cellar or elsewhere; he did not take to the bed entirely till he entered the hospital. He lost about a tablespoonful of blood from the nose on the 4th day of disease. The day of his entrance into the hospital I made the following notes:—

July 12th, the 5th day of disease.—The mind is in all respects normal; little sleep last night; trifling frontal headache; expression natural; conjunctivæ pale; pupils in all particulars natural; no vertigo; no affection of the special senses.

He can leave his bed unassisted with facility, but states that he feels he could *not walk* alone. Tongue moist, red at the tip, covered with a yellowish fur posteriorly: papillæ large, red—some pain in deglutition—tonsils, *velum pend. palati*, *uvula*, and posterior wall of pharynx deep red; no tenderness behind the *rami* of the lower jaw; bowels much relaxed; he passed six or seven stools last night; abdomen resonant, gurgling limited to the right iliac fossa—pulse 96, full and soft; trifling cough; no abnormal physical chest signs—skin warm, moist, *covered with a delicate scarlet rash*.

On the following day the tongue was rather dry in the centre, and very red at the tip; in other respects—mind, rash throat, and diarrhœa—he was as on the 12th. On the seventh day the rash was paler, and the throat was less sore; and on the 15th of July, *i.e.*, the eighth day of disease, I noted—The nurse reports that he slept well last night—no headache; cheeks flushed; tongue moist, red, smooth, with large papillæ, covered with a yellowish fur posteriorly; stools relaxed; less sore throat than on admission; abdomen resonant; loud gurgling on pressure in the right iliac fossa; there is decided tenderness in the same situation. *Scarlet rash gone; four rose spots on the abdomen and thorax, and five on the back.*

From this time till the 15th day the disease pursued its ordinary course; the spots first seen disappeared in three or four days, fresh spots having in the meantime made their appearance, to be in like manner followed by others. On the tenth day he became delirious, and while so left his bed repeatedly to wander about. His bowels continued very much relaxed, and the stools of watery consistence. The cheeks were often flushed, sometimes one, sometimes both; the sore throat on the fourteenth day was very trifling, and at the same time he was so weak that with difficulty he turned in bed unassisted; his tongue was dry and brown, and his stools were chiefly passed into the bed unconsciously. His pulse was 108 and reduplicate; he slept much night and day.

On the 15th day, he was reported to have dozed, with little interruption, from the time I saw him on the 14th day till two a.m. on the 15th, when he had an attack of convulsions. Both sides of his body and face were equally affected—his eyes, the nurse said, kept opening and shutting—there was no foaming at the mouth—the convulsive movements were so violent that the night nurse stated that she thought he would "have been out of bed during the fit;" they lasted for a quarter of an hour. He appeared to those with him insensible at the time he was convulsed; the insensibility continued for about half an hour after the convulsions ceased. Before he recovered his consciousness he had an attack of rigors, and seemed, the night nurse said, "like a person with ague." The rigors were followed by profuse sweating, and it was while sweating that he recovered consciousness. He then complained of feeling very cold. At the time of my visit he was lying asleep on his back—cheeks flushed—pupils equal—conjunctivæ somewhat more vascular than natural—slight deafness. There was no headache. He could now sit up in bed with a little assistance, and he turned unassisted more easily than on the preceding day. On the 16th day, I found him asleep on his side; and on the 17th he was reading the Scripture. He continued, however, delirious at night till the 19th day. On the 20th, he was able to reach the close stool without aid. At the same time, the back appeared about to slough, so that it was considered desirable to place him on a water-bed. No notes of spots were made after the 22nd day; still, on the 26th day, the skin was hot and dry, and the pulse 108.

From the 25th to 27th.—Several small abscesses formed under the skin of the scalp. On the latter day his appetite was reported to be good. He passed one solid stool; his tongue was moist, and only slightly furred.

On the 29th day, he was extremely deaf, but in all other respects improving. No note was made after this date.

Submucous râle was heard for the first time at the extreme posterior base of both lungs on the 13th day, and a day or two after, a little mucous râle was observed over the whole chest. At no subsequent period was any dulness detected.

A physician of eminence gave Robert P. a certificate, stating that he was labouring under scarlet fever; and certainly the symptoms, at the time of the man's admission, closely resembled those characteristic of that affection; but the fact, that the disease began with diarrhœa, that epistaxis had occurred the day before Robert P. entered into the hospital, the co-existence, when he came under observation—a week from the outset of the illness—of diarrhœa and headache, and the presence of fulness and resonance of the abdomen generally, with gurgling in the right iliac fossa, and the sonorous râle heard over the whole chest, led me to think it highly probable that he was really suffering from typhoid fever. I had several times seen a scarlet rash precede the evolution of the rose spots; I thought it, therefore, probable that the rash was of that kind, and the sore throat an accidental complication. The patient had been ill only six days when he entered the hospital; on the eighth day of disease the appearance of rose spots removed all doubt. The subsequent course of the case would have rendered its nature evident even to the least experienced.

This man presented a striking exception to the rule, that cases in which convulsions occur in the progress of typhoid fever are fatal. The day after the convulsions he was decidedly better than the day before. Severe rigors followed the convulsions, and yet there was no evidence that any local inflammation was being set up. Were the convulsions due to cerebral congestion or to inflammation? There is not in the notes of the case, or in the subsequent or antecedent history of the case, any evidence in favour of either view. That general morbid condition of the blood which is the cause of so many of the symptoms, was probably the cause of the convulsions. I have before referred to this when commenting on the 13th case, contained in the fourth paper. It was, in the case now under consideration, as in many others, interesting to watch the progress of the spots, *i. e.*, the repeated eruption of scanty crops,—each spot remaining visible only a few days, the fresh spots appearing without any relation to the fading of those which preceded them. Just as *tinnitus aurium* is often present at the early stage, so deafness is a common symptom towards the termination of typhoid fever. I cannot say that either is a favourable or unfavourable symptom.

MENTAL WEAKNESS SOMETIMES A SEQUELA OF TYPHOID FEVER.

Case 31.—In a lad aged 16—headache—epistaxis—dia-

rrhœa—delirium—noise in ears—loss of strength—enlarged spleen—dry, brown, glazed, and fissured tongue—confined bowels—solid stools—copious eruption of rose spots—convalescence about the 28th day—mental weakness for more than a fortnight after convalescence.

Thomas S., aged 16, a thin, fair-complexioned lad, with light hair and eyes, a native of London, by trade a plasterer, was admitted June 13th, 1849, into the London Fever Hospital, under the care of Dr. Tweedie. He states that six years ago he had a severe attack of fever, and that since that time his health has been good.

His present illness began Tuesday, June 8th, with pain in the head, general weakness, loss of appetite, trifling epistaxis, drowsiness, and diarrhœa. The epistaxis was repeated several times before, and the diarrhœa continued till, his admission. Delirium began on the day he entered the hospital, *i. e.*, the 8th day of disease, when the following notes were made :—

Some general headache, no vertigo—answers questions rationally, but thinks it is a fortnight since he left his work ; yet he remembers correctly enough that the day of the week on which he left his work was Tuesday. Face pale—conjunctivæ very slightly injected—pupils natural—expression dull, vacant, stupid—complains of noise in the ears, compares it to children bellowing—other senses normal.

He can leave his bed unassisted, but is unable to walk. Tongue dry, centre covered with a thick, pale, yellowish-brown fur, fissured ; abdomen resonant, a little pain about the umbilicus, no marked tenderness; no stool since admission, *i. e.*, one hour—splenic dulness seven inches by five inches.

Pulse 84, reduplicate, moderately full, soft ; a little sonorous râle on deep inspiration ; no cough.

Skin warm, dry—from one to two hundred rose spots scattered over abdomen, thorax, back, and upper and lower extremities—no miliary vesicles.

The rose spots, very numerous on the 9th day, were still more so on the 18th. At that time, my notes state many hundreds were present ; (a) and, also, that those marked on the 9th day had disappeared. Fresh rose spots were observed every day or two till the 24th day of disease. An abundant crop of miliary vesicles was noted on the 20th day. Although diarrhœa had been a prominent symptom before the boy's admission, the stools never exceeded two in the twenty-fours hours after he came under observation, and were always solid and well formed. On the 20th day he complained of want of food, and from that time ate some bread daily. On the same, *i. e.* the 20th day, his tongue, which up to that time had been dry, glazed, yellowish, brown, and fissured, became slightly moist and rather white. From his entrance till the 26th day he slept much, more than natural ; and, till the 23rd day, he was delirious when awake. After that there was no distinct delirium, but he appeared to be silly—quite childish. He was considered to be convalescent some time between the 26th and 30th days, but the childishness of mind and manner continued till he left the hospital, near the end of July.

Rose spots, although ordinarily limited to the trunk, are now and then, as in this case, found on the extremities ; far more rarely on the face. The spots were present on the 9th day of disease, when the boy was admitted ; how long before could not be ascertained. Unless especially looked for, rose spots, even when numerous, as in this ease, are apt to be passed by unnoticed. The course of the spots is of equal, if not more importance, with reference to their diagnostic value than their characters. The repeated eruption of fresh rose spots every day or two, without reference to the continuance or disappearance of the spots that preceded them, each spot lasting from three to five days, is not only a character of, but is absolutely peculiar to, typhoid fever. Fresh rose spots made their appearance after the tongue had begun to clean and the appetite was returning. An abundant crop of *sudamina* broke out at the end of the second week ; the connexion between this eruption and perspiration is as yet unfixed. At one time they were supposed to stand to each other in the relation of cause and effect, but Louis' observations have thrown doubt on this imagined connexion. I have before adverted to the fact, that sudamina are rarely seen on individuals more than forty years of age, and still more rarely, if ever, on those more than fifty years old.

The peculiar condition of the mind, which leads an individual to suppose that a longer time has elapsed since any given event than has really passed away—that a given time has been prolonged, was observed in this case. The mind thus affected may recall particular events, while it prolongs the interval between the given event and the time of narration : thus, James S. thought he had been ill fourteen days instead of nine days; at the same time, he knew that it was on a Tuesday that his illness commenced. The state of mind here referred to was present in others of these cases. Its analogy with the mental state which constitutes dreaming is striking. How often, during a dream, do minutes, seem hours or weeks! And when was the reverse, with reference to duration, ever dreamed?

Tinnitus aurium was, on the boy's admission, a marked symptom. He complained of it spontaneously, and used the emphatic expression, "bellowing of children," to indicate its annoying character. The whirl of the railway train, the waving of trees by the wind, the ringing of bells, and the roaring of the sea, are often referred to as descriptive of the noise in the ears which disturbs the patient labouring under fever. The stools were solid after the boys admission, although he had previously suffered from diarrhœa.

This case has been given especially to illustrate the fact, that mental weakness occasionally follows typhoid fever. The loss of intellectual power is, however, only temporary. A few weeks ago I met this boy. He had grown stout and healthful, and his mind had regained its normal vigour.

(a) A cast of the spots was taken on the 12th day of disease. A wax model, prepared from that cast, is in University College Museum. A drawing from the model has been made by Mr. George, of Hatton Garden, and will be published in the next volume of the "Transactions of the Medico-Chirurgical Society."

ON THE MEDICINAL ACTION OF ARSENIC IN CUTANEOUS AND OTHER DISEASES.

By THOMAS HUNT, Esq., M.R.C.S., &c.

No. II.

Having endeavoured to demonstrate the efficiency of arsenical medicines in chronic diseases of the skin, we proceed to inquire into the conditions on which that efficiency depends.

It is very clear, that, in order to obtain the highest degree of advantage from any medicine, we must know when and how to use it. No medicine will ever cure a disease, any more than a pair of forceps will extract a tooth. Medicines are tools ; and their adaptation to the purpose for which they are used will by no means accomplish that purpose (except by mere accident) apart from the intelligence and discrimination with which they are prescribed. In ninety-nine chronic idiopathic diseases of the skin out of a hundred, arsenic will do everything *or* nothing, *or* worse than nothing, just as it is administered. An inquiry into the conditions requisite for the effective exhibition of arsenic involves special considerations, which may be comprised under three heads :—The state of the patient; the effect intended to be produced by the medicine; and the most eligible mode of producing that effect. In considering these questions, it will not be possible to treat of them *seriatim* or separately, but it is desirable that they should be distinctly recognised by the reader as three very different points which should not be confounded together. Premising that the medicine used in the following cases was the liquor potassæ arsenitis of the London Pharmacopœia, we shall first say a few words on the

CONDITIONS UNFAVOURABLE TO THE ADMINISTRATION OF ARSENIC.

1. A *febrile* state of the system, especially the sthenic form of pyrexia, indicated by the usual signs. If the pulse be frequent, and not easily compressed, the skin hot and dry, and the secretions scanty, and especially if there be chills and heats succeeding each other, arsenic will be found useless, or worse than useless ; but, when this state of the system has been rectified, it may do good, as exemplified in the following case :—

Case 7.—Lepra Vulgaris.—A gentleman of full habit of body had suffered for about five years from numerous and extensive patches of lepra, occupying various regions of the body, and attended with intolerable pruritus, which had, of

late, materially disturbed his rest. Arsenic was tried repeatedly, but without the slightest benefit; the irritation seemed to increase under its use. It was, at length, observed, that the pulse was rapid and incompressible, the skin hot, the tongue foul, and the patient, on being questioned, complained of thirst and feverishness. He was now treated with salines and aperients, continuing the arsenic as before; but, at the end of a fortnight, there was no improvement, the pulse continuing full. A pint of blood was now taken from the arm, and in less than a week he was much better; the skin became cool, the pulse quiet, the tongue clean, and the leprous patches assumed a faded appearance. The arsenic was continued for another month, by which time all the scales had disappeared, and the skin had become smooth. The disease returned in the following spring, and again yielded to arsenic, but not until leeches, cathartics, and a low diet, had prepared the system for its use.

In this case, as in many others on record, a general principle is involved, which applies to the treatment of all diseases attended with sthenic inflammation, viz., to reduce the vascular action to the normal standard before attempting to carry out any special indication.

2. A condition of the circulation the very reverse of that which has just been described, has been known to present a limit to the salutary effect of arsenic, though by no means an objection to its use, as illustrated in the following case:—

Case 8.—*Psoriasis Diffusa.*—The skin of a girl of ten years of age exhibited extensive and irregular patches of a scaly disease which had proved obstinate under treatment; but on the administration of arsenic the disease rapidly improved up to a certain point. It then got as rapidly worse, and the child was shown to me. I found the pulse extremely weak, the appetite defective, and the patient languid and debilitated. The dose of the arsenic was reduced, and a grain of quinine, with some compound tincture of bark, was ordered to be taken twice a day; and with the return of appetite and vigour, which ensued under this treatment, the skin got speedily well.

3. A syphilitic taint in the system will render the disease incurable by arsenic, although in some cases it is beneficial in a degree.

Case 9.—*Syphilitic Lepra.*—A middle-aged married woman had a scaly eruption on the legs and thighs, which occasionally degenerated into fissures and ulcerations. There was a copper-coloured hue about the scales, and a dusky leaden appearance of the skin which had healed. A surgeon had treated it with arsenic with temporary benefit, not suspecting the existence of syphilis. Close inquiries, however, elicited, that although the husband was healthy, a sore on the right labium of the patient (the cicatrix of which was strongly marked) had resulted from connexion with a young man before her marriage, and this had been succeeded by an ulcerated throat. An energetic but short course of mercury was now administered, and in less than a month the skin was entirely free from disease.

4. The existence of organic visceral disease, as a complication of eruptions; an attack of diarrhœa, bronchitis, cynanche, coryza, or severe irritation in any mucous membrane; and certain conditions of the nervous system, especially those connected with dyspepsia; all these, and nearly all other disorders of the general system, generally contraindicate the use of arsenic; but if the health can be restored by other means, arsenic may afterwards be administered with advantage.

Case 10.—*Psoriasis complicated with dyspepsia.*—T. A., aged 22, had been from the age of seven years the subject of psoriasis, which in the spring and autumn was always much aggravated, extending over the greater portion of the whole surface of the body. He was likewise habitually troubled with headache, flatulency, and indigestion. He had been bled many times without advantage, and had taken arsenic in large doses for six months together. It made him sick, and he was consequently obliged to abandon its use, although the skin was in some degree benefited by it. The compound decoction of aloes, together with the compound rhubarb pill, administered for a few days only, completely relieved his dyspeptic symptoms. Arsenic was then administered steadily for seven weeks, and at the end of that period the skin was perfectly well, a slight degree only of sickness having been complained of during the last week of the course; but this subsided on discontinuing the mineral.

That the conditions above described are decidedly unfavourable to the exhibition of arsenic might have been proved by a multitude of cases, but few only have been selected as satisfactory samples of the rest. To these proofs may be added the testimony of many of my respected correspondents, who severally use the following terms as descriptive of the conditions which have been found, in their experience, incompatible with the advantageous use of arsenic, viz.:—Unsound lungs, natural irritability of mucous membranes, plethoric and inflammatory states, tonic condition of the system, sanguineous temperament, inflammatory tendency, tendency to sudden nervous exhaustion from any cause, irritability of constitution, acute diseases, proneness to irritability of the circulative or assimilative system, eczema mercuriale, head symptoms, organic disease.

Conversely, the conditions which have determined the respondents severally on the use of arsenic, or in other words, the indications for its exhibition, are comprised in the following terms, viz.:—The phlegmatic rather than the sanguine temperament; cachectic lax-fibred habits; when other medicines fail; in periodic diseases; debility; atonic state of the system; good general health; obstinacy of the disease; the presence of lepra; the chronic character of the disease; general pallor; slow circulation; general coldness; non-inflammatory condition; freedom from febrile or mucous irritation.

MODE OF ADMINISTRATION, DOSE, &c.

I. As arsenic is liable to irritate the stomach and bowels, and as this circumstance has been frequently considered a formidable objection to its use, it is important that it should be administered not on an empty stomach but rather with or after a meal. And there is another reason why this mode should be preferred. Dr. Golding Bird justly remarks, that as the elements of the food are absorbed by the lacteals and not by the veins; and as, on the other hand, the substances not forming part of the food are, when in solution, absorbed by the venous capillaries, arsenic or iron in solution, when taken on a meal, so as to mix with the food, will be almost entirely absorbed into the chyle by the lacteals; but if taken on an empty stomach the medicine will be chiefly absorbed by the venous capillaries, and enter the *portal* circulation. Now, as we wish the arsenic to enter the *general* circulation, it should be mixed with the food, or at least swallowed after a meal. The food present in the stomach not only dilutes the medicine, and thus preserves the mucous membrane from immediate contact with it, but in some measure provides for its direct transmission into the general circulation.

These propositions are so nearly self-evident, or at least so necessarily deducible from established physiological truths, as to require no cases for their demonstration.

II. Arsenic is a cumulative medicine, and therefore should never be administered in increasing doses; otherwise a sudden and sometimes an alarming development of its toxical effects will necessitate an entire suspension of the medicine. This is a most important point. Arsenic has been usually administered in increasing doses. It is directed in every work on the materia medica, and in every treatise on cutaneous diseases which have met the writer's eye, to be given in small doses *gradually increased* until some unpleasant effects become manifest, then to be *suspended for a time.*

A large majority of my seventy-five correspondents had been accustomed to administer arsenic in this way, and they record one or more of the following effects as the result of this method, viz.:—"Conjunctivitis," "swelling of the limbs or features," "irritation of mucous membrane," "purging," "gastritis," "desquamation of cuticle," "general inflammatory state," "flushings," "headache," "exhaustion," "restless nights," "sinking," "giddiness," "palpitations," "mental agitation and alarm." On the other hand, I have been accustomed, for many years, to administer arsenic differently. Beginning with five minims of Fowler's solution, three times a day, and continuing that dose steadily until the conjunctiva or tarsi became slightly affected; then reducing the dose again and again as the cumulative action became apparent in the state of the *tarsi*, I have very rarely observed any of the more formidable results in the above catalogue of symptoms. And it is remarkable, that every writer who recommends increasing the dose, also very properly advises an entire suspension of the medicine when toxical symptoms appear. The consequence of this suspension is, that the disease relapses, and proves "obstinate and intractable." Whereas, if the dose be mo-

derate and uniform in the first instance, and reduced when the conjunctiva becomes slightly inflamed, there will be no necessity for suspending the medicine at all; and, by steady perseverance, we may rely upon the arsenic wearing out the disease without injuring the health; and, in fact, the health is generally found to improve under its influence.

The theory on which this practice is founded is very simple. If all subjects were equally susceptible of the action of the medicine it would be not only safe but advantageous to begin with at least twenty or thirty drops of Fowler's solution for a dose, this being the average dose borne without injury. But, as we do not know what a patient will bear, different individuals varying considerably in their tolerance of arsenic, we begin with a moderate dose, say five minims three times a day. Now, a person taking this dose three times a day, will have taken, in ten days, just 150 minims, and the effect of this on his system will be the same as that of taking 150 minims (minus the quantity excreted in ten days) at a dose. That this hypothesis is very near the truth I have demonstrated in hundreds of cases.

Case 11.—Mr. Girdwood relates that a patient took two drachms of Fowler's solution in twenty-four hours by mistake. It cured the ague for which it was administered (a tertian), and it had no detrimental effect.

Case 12.—A lady, by mistake, took forty minims of Fowler's solution three times a day for several days: she felt no inconvenience for the first two days, but on the third and subsequent days her nerves became irritable, and in less than a week she was visited with trembling of the limbs, dimness of sight, sensations of exhaustion, and other affections of the nervous system.

Case 13.—A lady of delicate habit took, for the cure of a cutaneous eruption, five minims of Fowler's solution three times a day for three days; in all, forty-five minims. She then complained of a general tremor of the limbs, and inflammation of the tarsi.

Case 14.—One of my correspondents administered ten minims of the solution three times a day for two or three months without the slightest sensible effect being produced, either local or general.

These four cases show that the susceptibility of arsenic varies much in different subjects; that where the susceptibility is not great a dose of two drachms of the solution can be borne about as well in one dose as in twenty; and that where the susceptibility *is* very great, forty or fifty minims given in divided doses for three or four consecutive days will produce an effect on the system, clearly cumulative. It is not necessary to say another word in favour of this mode of administration, since it is evident that both the safety and success of the medicine will mainly depend upon it.

Bedford-square, August, 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

ABSCESS.

No very fixed rule can be laid down respecting the propriety of opening abscesses; much must be left to the skill of the surgeon in individual cases. If there be nothing to contra-indicate the practice, an abscess may be left to burst of itself; the slow discharge of the pus, and the gradual contraction of the cyst, favouring the healthy granulation and cicatrisation of the wound. But there are many situations, in which the collection of matter, deeply seated, and perhaps bound down by strong fasciæ, may burst into important organs; may produce constitutional disturbance greater than the patient can endure with safety; or may insinuate itself amongst muscles, tendons, and vessels, glueing them together, and destroying the mobility of the parts. As was mentioned in a preceding report, iliac and other abscesses under the abdominal walls, should be opened as soon as fluctuation is clearly felt. So, also, abscesses under a strong fascia, as that of the neck or palm of the hand; and in these situations fluctuation may be very obscure. Boils, carbuncles, and the infiltration of pus from the extravasation of urine, hardly come under the head of abscess; when a small quantity of urine, escaping under the perineal fascia, leads to the formation of an abscess, the sooner an opening is made the better. Suppurations in important organs, as in the globe of the eye or the testis, may be opened if they produce great suffering; but the measure is not by any means generally called for, especially in the latter organ, where they are generally connected with the deposit of tubercle. It should never be forgotten that, in dealing with large collections of matter, it is quite possible that the pus may be completely absorbed, and the patient spared the weakening effects and the danger of a prolonged discharge from a large secreting cyst. It may be said, then, with reference to acute abscesses, if they be subcutaneous, and show a disposition to point, they may be left to burst, or they should be opened only when the skin has become thin. If situated under a fascia, or in or near an important cavity, they should be opened as soon as possible. Chronic abscesses, especially those which form about the vertebral column, should not be opened in a hurry. They often disappear spontaneously. They do better when they burst than when they are opened, and do not require to be punctured, unless they are decidedly spreading.

About the latter end of July, 1845, Mr. Lawrence was consulted by the friends of a boy who was suffering from a large chronic abscess, measuring three inches in its long, and two in its short diameter, situated just below the angle of the left scapula, and evidently connected with disease of the vertebral column, which was stiff and somewhat painful. It had been proposed to open it, but there being no urgent symptom Mr. Lawrence recommended delay. The boy returned to the country, and was brought to town again in about six months, (Jan. 14, 1846,) when there was no trace whatever of the abscess, the pus having been entirely absorbed.

The same treatment is applicable to abscesses connected with the exterior of the pelvis, where they often assume the characters of a firm cartilaginous or bony tumour, until the fluid makes its way towards the surface.

Harriet B., aged 19, a healthy-looking girl, noticed, eight months ago, a small tumour, occasionally rather painful, upon her left buttock. It has slowly but steadily increased in size. When quiet she is generally easy, but she suffers pain from time to time, and she cannot walk without limping. The integuments, loose and healthy, cover a tumour the size of the closed fist, hard, and apparently bony, but with one softer central spot, firmly attached to the left ilium, near the sacro-iliac synchondrosis. There is no preternatural heat, nor is it painful when examined. The uterine functions are regular, and there are no symptoms of constitutional disturbance. Admitted under Mr. Lawrence, April 30, 1846.

May 16.—There is a prominent part of the tumour of softer consistence than the rest; there is a small tumour the size of a marble, under the integuments, near the anus.

23.—The tumour is softer and more projecting; fluctuation is distinctly felt; and there appears to be a considerable collection of matter.

To take two grains of sulphate of quinine three times a-day. Meat diet.

June.—She left the hospital to go to the sea-side. The tumour was in the same state; but her general condition was improved. She has been seen from time to time; the abscess seems to be gradually diminishing in size.

The quantity of matter contained in these chronic abscesses is at times considerable. I have seen as much as sixty-four ounces by measure evacuated from one single cyst. It is no matter of surprise, that when, in consequence of an opening made by a lancet, inflammation of this highly vascular secreting membrane ensues, the constitutional disturbance should be sufficiently severe to excite alarm.

Joseph C., aged 40, was admitted into the hospital, July 17, 1845, with a large abscess of the left-side of the buttock, of six months' duration. There was the cicatrix of a former abscess, which he said was of the same size, over the angles of the inferior ribs of the right-side. An opening was made by a lancet into the abscess of the buttock, and about three quarts of thin but tolerably well formed pus were evacuated.

20th.—He has experienced during the last two days severe

pain in the loins; the skin is hot; the tongue white, and he complains of thirst. The discharge from the abscess thin and small in quantity.

28th.—The feverish disturbance has somewhat abated, but he feels weak, and has no appetite. He left the hospital, at his own desire, to go into the country.

In the case here related, the abscess which formed over the ribs was allowed to pursue its own course, the man continuing at his employment nearly the whole time. It burst, and healed without any unfavourable symptoms. The second abscess, when punctured, became inflamed; severe feverish disturbance ensued, which rendered it necessary to bestow no inconsiderable attention on the patient. Cases occasionally happen, in which the inflammation attacking a large cyst proves fatal by the constitutional disorder which it occasions.

Abscesses require to be opened early when formed amongst important parts, and bound down by a tight fascia. But then they are placed in that very situation where a knife, incautiously introduced, may do considerable injury. The thecæ of the fingers, the palm of the hand, or the cervical region, are familiar instances of such situations.

Alfred W——, a messenger, a healthy looking man, of regular habits, was admitted Nov. 6, 1846, with a large firm tumour on the right side of the neck, under the sterno-mastoid muscle. He states, that six months ago, after an attack of rheumatism, which produced pain and palpitation of the heart, he noticed the swelling in the neck, which, hard and incompressible, and occasionally hot and painful, increased slowly in size. He has followed his usual employment; has eaten and drunk as usual; but with any excess the swelling throbbed, and became painful. He had been taking sarsaparilla, and rubbing iodine upon the swelling, previous to his admission into the hospital. He was ordered opening medicine, and milk diet.

Nov. 11.—Mr. Lawrence passed a double-edged bistoury to a depth of full three inches behind the posterior border of the sterno-mastoid muscle; there flowed out about four ounces of thin yellowish pus mixed with blood.

16th.—He left the hospital at his own desire—the swelling was much reduced in size—the discharge had become thicker, and more like healthy pus.

A curious case, illustrating the successive formation of abscesses without any apparent cause, occurred in the practice of Mr. Lawrence in the month of January, 1848. A lady, staying with a surgeon in London on a visit, went out in apparently perfect health to an evening party. She came home with swelled face, and it was supposed she was suffering from an attack of mumps. Some leeches were applied, but the redness and swelling increasing, Mr. Lawrence's opinion was asked. In the course of a few days the neck swelled, and an abscess formed, which was opened; some thick pus flowed out, and in a very short time the opening healed. In a few weeks there formed in the thigh a second abscess, which pursued precisely the same course; some thick pus escaped, the succeeding discharge was small in quantity, and the opening healed within the usual time. Soon afterwards a third abscess formed over the right scapula; then a fourth over the right hip. The case is singular as occurring in a person in apparently perfect health, and brings to mind some of those instances of repeated suppuration following poisoned wounds, of which so good an account is given in Mr. Travers's work on Constitutional Irritation.

In the early part of last year I had the opportunity of seeing a patient of Mr. Skey's, in whom an abscess under the pectoral muscle pursued a somewhat curious course. An officer in the Indian army, who had suffered constitutionally from exposure to the climate, came home upon sick leave, with cough, emaciation, and swelling under the left pectoral muscle. The lungs were examined with the stethoscope by Dr. Latham, who pronounced them sound, and under proper treatment the cough nearly left him. But the pectoral swelling enlarged, and in six weeks fluctuation was clearly detected; the matter seemed inclined to point about an inch and a half below the middle of the clavicle. An opening was made by Mr. Skey with a trochar, and eight ounces of blackish brown fluid were evacuated. When examined under the microscope, it proved to be composed of altered and disintegrated blood discs floating in serum. The opening healed readily, but in about a fortnight the abscess reformed; it increased in size, pointed under the clavicle near the first opening, burst, and discharged healthy yellow pus.

Abscesses in the abdominal parietes are not of common occurrence; when fluctuation can be detected they may be opened; but if situated under the integument they point readily, and, after bursting, heal without unfavourable symptoms.

Rhoda W., aged 10, whilst running towards a garden, fell down a flight of stone steps, and struck the right side; the fall gave her considerable pain, and soon afterwards her mother noticed a tumour, the size of a pigeon's egg, imbedded in the abdominal parietes on the right side, and about an inch above Poupart's ligament. A surgeon recommended the application of an ointment composed of the iodide of potassium, which, however, produced pain and increase in the size of the tumour. She was admitted into the hospital. The tumour, as large as a hen's egg, was firm and apparently solid; but as there was one spot where the feeling communicated to the fingers was uncertain, a grooved needle was introduced, and some healthy pus escaped. A poultice was applied, the abscess pointed and burst, and the child was discharged well.

I have seen the same thing occur in an infant. Scrofulous children are very subject to small suppurations in the neck; and it is recommended, especially in the case of females, where it is desirable to avoid the scar which will always ensue where an abscess ulcerates spontaneously, that an opening should be made early by a lancet. Scrofulous abscesses will leave their undoubted marks behind them, whether they be treated surgically or pursue their own course; and if it be borne in mind that they are more likely to heal soon when not interfered with, I doubt whether the advice here given is good. Let the abscess pursue its course, and allow the integument to become thin; it can then be opened without much pain and with advantage, if it be not inclined to burst; but it is surely a vain hope that this very troublesome affection can be treated so as to leave the integument free from disfigurement. H. C.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,
Assistant-Surgeon to the Hospital and Demonstrator of Anatomy in the School.

DISLOCATION OF THE FEMUR INTO THE OBTURATOR FORAMEN.

This is the second case of dislocation of the kind which has been brought here within the last three months, and occurred to a lad aged nine years, admitted under Mr. Adams 14th of August. The displacement happened in the following manner:—In the boy's endeavour to get up behind a carriage (which was going at the rate of seven or eight miles an hour, according to the calculation of the man who brought him to the hospital, and saw the manner in which the accident took place,) his left leg became entangled between the spokes of the wheel; the limb, consequently, was forcibly and quickly abducted, and the head of the thigh bone slipped out of the cotyloid cavity. The leg had sustained an extensive laceration at its outer part, involving the integument in an oblique direction from above downwards and outwards to the extent of six inches, immediately over the tibialis anticus, which muscle was detached to a considerable extent from its connexions with the bone. A quantity of dirt and small pieces of gravel were imbedded in its lacerated fasciculi, and the contused fascia, and cellular membrane. The periosteum of the tibia was detached to the extent of an inch and a half in length and half an inch in breadth. The characteristic symptoms of the dislocation were well marked: prominence of the outline of the crest of the ilium; lateral inclination of the pelvis; flattening in the gluteal region, and over the trochanter major; marked fulness beneath the adductor brevis and pectineus; change in the axis of the thigh-bone, which was directed downwards, forwards, and outwards, so that the knee was separated to the extent of about a foot from the opposite one; inclination of the body (when the boy was held up) slightly forwards and to the affected side; elongation of the limb, to the extent of an inch and a-half, when the measurement was taken from the spine of the pubis to the patella, no difference being observable when it was taken from the anterior superior spine

of the ileum. (a) The pain usually complained of along the course of the cutaneous branch of the obturator nerve, was masked by the pain the boy experienced from the injury to the leg. The foot was neither everted nor inverted, but the heel was slightly raised. Reduction was effected in the following manner:—A wet bandage was, in the first instance, carefully applied over the leg; another smaller one was bound, as firmly and as smoothly as possible, round the lower part of the thigh, and over this a jack-towel with the clove-hitch was adjusted. The boy having been placed in a recumbent position, perfectly flat on the bed, extension was commenced and continued for about a minute in the direction of the axis of the dislocated bone, Mr. Williams, the dresser of the week, having previously seated himself on the bed opposite to the boy, and placed the foot in the perinæum protected by a pad; the limb was then drawn gradually inwards (extension being still kept up) and backwards by the ankle, beneath the leg of the assistant, and having been rotated, during this movement, slightly outwards, the head of the bone, on the relaxation of the extending power, slipped into the cotyloid cavity with a distinct jerk,—the foot of the assistant having acted as a capital fulcrum.

The manner in which the accident happened in this case is worthy of remark, as differing from that which ordinarily obtains, viz., from a weight falling on the buttock, the pelvis being fixed, and forcing the head of the bone downwards and forwards. In this instance the pelvis was in all probability fixed, and the displacing force was applied at the lower extremity of the limb, which, being caught between the spokes of the wheel, was forcibly abducted and extended, and the head of the bone became thus placed within the sphere of action of the adductor muscles, which at once drew it into the thyroid foramen. The remarkable analogy which the symptoms of dislocation of the head of the femur into the obturator foramen have to those characteristic of *dislocation of the head of the humerus into the axilla* are worthy of being kept in mind. The flattening of the gluteal and deltoid regions; the elongation of both limbs, and the direction of their axes downwards, forwards, and outwards; the fullness under the pectineal and pectoral muscles; the occasional pain and numbness in the course of the nerves, on the trunks of which the heads of the bones especially press; namely, the obturator and brachial and ulnar. The mode of reduction, also, usually had recourse to in displacement of the humerus into the axilla, was here also imitated by placing the foot in the perinæum, &c. This method would, of course, be only applicable in young subjects, or those in which the muscular system is comparatively but slightly developed.

CHARING-CROSS HOSPITAL.

By R. HAMILTON, Esq., M.R.C.S.,
House-Surgeon to the Hospital.

RHEUMATIC FEVER TREATED BY LEMON-JUICE.

Some few months ago, a long discussion took place at the London Medical Society, on the value of lemon-juice in the treatment of rheumatism, and its efficacy was by many denied. In the following case, Mr. Hancock having tried various remedies, as colchicum, calomel, and opium, &c., without much benefit, prescribed it, considering it a good opportunity for testing its value. It has been, for the last year or two, given at Guy's Hospital, and is very highly spoken of by Dr. G. O. Rees and Dr. Babington.

Ellen Wilson, a servant, aged 22, was admitted July 1st into the hospital, under the care of Mr. Hancock, with chronic disease of the inferior maxillary bone of nine years standing. She was in Guy's Hospital a few weeks back, with a slight attack of rheumatism, but was not treated with lemon-juice. About eight days after her admittance, she was taken very ill with pains in all the limbs, coated tongue, flushed face, headache, and sickness. She was ordered the wine of colchicum with magnesia, which she continued for some days without any benefit, the rheumatism shifting about from one joint to another; at one time the knees and ankles being much swollen, and exquisitely painful; at another the wrists and elbows; the tongue being coated with a white fur, the face flushed, and perspirations profuse. There was also some affection of the heart, the *bruit de souffle* being heard distinctly, though she complained of no pain or uneasiness in the chest; the pulse also was intermittent. Her medicine was then changed to the calomel and opium, two grains of the former to a quarter of a grain of the latter to be taken every four hours. To have also the ung. hydrag. fort. rubbed into the thighs daily, and a blister to be applied to the chest.

Under this treatment the chest-symptoms subsided, but the pains in the joints remained as bad as ever.

July 18th.—Mr. Hancock ordered half an ounce of the lemon juice to be taken three times a day, and to discontinue the other medicines.

July 20th.—There is an abatement of all the symptoms, the pain in the knees decidedly less; the pulse 120 and full; perspires less; swelling diminished.

22nd.—Pulse 104, and weaker. Can raise her legs in bed; the tongue cleaner.

24th.—Continuing to improve; the pains in the limbs almost gone, and is able to get in and out of bed without assistance.

From this time she continued to mend daily, and in about a week the lemon-juice was discontinued, and one grain of quinine, three times a day, prescribed.

Throughout the case, the urine was acid and small in quantity; its specific gravity was not taken.

(a) This circumstance has been particularly dwelt on by Mr. Adams, in a Clinical Lecture published in the *Medical Gazette* of July 10.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 14.

MEDICAL MEN;—THEIR VOCATION IN THE PROGRESS OF CIVILISATION.

There is scarcely any popular idea more vague and illusory than that shadowed forth by the word—Civilisation. The phrase is on every lip, and each speaker confidently imagines that he understands its import, yet he would be puzzled to express it in a definition, or to maintain the consistency of his opinion before a Socratic philosopher. Civilisation is understood, both in a moral and a material sense: in the first relation it is the expression of a sentiment, and in the second of a fact. As medical practitioners, we have no further interest in the moral aspects of civilisation than every honest man and conscientious Christian ought to feel in the universal obligations of truth and virtue; but inasmuch as demoralization and crime are the offspring of, and often a heritage from, poverty and filth, and since these agencies are also the causes of manifold diseases, the assuagement and removal of which it is the peculiar mission of our profession to attempt, it becomes us to consider what share of influence medical men have exercised, and many continue to exercise, in the advancement of the civilisation of our age.

If civilisation be the expression of a fact, what is that fact? The merchant will tell you that it consists in warehouses filled with hogsheads of sugar, bales of cotton, and pipes of old wine, with good credit on 'Change, and a large connexion; the tradesman will solve the riddle by the help of the Œdipus in his till, and measure the prosperity of society by the scale of his weekly receipts; the alderman, superannuated from the cares of the world, and inaccessible to the vicissitudes of fortune, will wax eloquent on its blessings, as he snuffs the Sabean odours of a savoury ragout, and anticipates the beatitude of its indulgence; the bride of yesterday will typify it in the resplendent lustre of her virgin satin, in the chaste beauty of her folds of flowing lace, in her pearls and gems, her bracelets, and her rings; the wife of to-day will smile with complacency upon her damask couches and gilded mirrors, her ottomans and screens, her perfumes from

Arabia, her silks from Benares, and her carpets from Teheran; and most devoutly believe that the luxury with which she is surrounded is the true symbol of civilisation, and is the consummation of the hopes and labours of life. According to modern notions and English practice, the devotees of Mammon,—the worshippers of the sensuous and the material, are right in their creed, and we will not gainsay either the verity or the utility of their confession of faith. But civilisation is a *fact*, or rather an aggregate of facts; and if velvet and lace, tapestry and diamonds, sumptuous apparel and good living, constitute one set of facts as the result of that activity and combination of forces in operation in civilised life,—shall we also designate as civilisation the rags, filth, destitution, crime, disease, and premature death, which equally result from the influence of the same causes?

No man will question that the ruling idea of modern society has prevailed to the augmentation of disease and suffering among the labouring classes of this country. In our haste to get wealth, we have permitted to grow up around us usages and institutions that have emasculated the energies, corrupted the morals, and destroyed the lives of our working population. Pursuits and customs that have tended to increase the comforts and the happiness of one class, have pressed prejudicially upon another. It would be as legitimate to point to the emaciated countenance, the tattered dress, and the lost virtue of the shirt-makers as the type of our civilisation, as to the refined elegance and moral purity of the daughter of a merchant prince. We must correct these things. Civilisation, in its higher sense, must widen her domain: she must start upon a new voyage of discovery, and sink her plummets deep into the lowest abysses of human life. She must survey the bleak and barren shores of poverty and ignorance, and bring them under cultivation, so that they may render their tribute to the great harvest of humanity.

Now here we discover the divine vocation of our profession. The physician is the poor man's friend and advocate: he knows better than others his sufferings and his wants, and has a clearer apprehension of the evils that desolate his home and peril his life. The physician, too, in consequence of a constant intercourse with the distressed, has a livelier sympathy with suffering, and a more active benevolence than other classes of the community, so that it has happened, as we might expect, that in all ages, and especially in the present, the poor man's stake in the great interests of civilisation has been pressed home with more zeal and success by medical men than by all other orders of men — moralists, divines, and legislators, put together.

It has been said by a Prince, whose intelligence has given him a right to be quoted among authors, that the scale of a nation's civilisation is denoted by its works of art, its Corinthian columns, its porticoes, and its statuary. There is, however, a higher standard of civilisation than this. Works of public utility, as they respect the well-being of the masses, are more indicative of an enlightened civilisation than all the palaces and temples on which Genius, sacrificing to vanity or superstition, has lavished her most glorious efforts. The polite arts are ancillary to the taste and pleasures of a few,—public works are instrumental to the happiness of a nation. It is possible that a wealthy aristocracy may carry the elegant arts to the highest perfection, whilst the interests of the people shall be, to a great extent, disregarded. It is natural that those who have wealth and power should consult their own interests and enjoyments before they extend to the poor a participation in social advantages. Where such participation exists, it is a pretty accurate evidence of an enlightened people. The aqueducts of Rome are the noblest records of the civilisation of the people of the Imperial city.

In our own day we are carrying out those civic ameliorations which indicate, beyond all other national acts, the progressive civilisation of our age. Sanitary Reform is the great question of the time; and, should peace happily continue, will engross, for many years, the consideration of British statesmen. A new system of sewage will be speedily commenced; a better supply of water to the metropolis will also demand early consideration. One great acquisition, however, is already made, for the Legislature has definitively resolved that the scandal and the pollution of intramural graveyards shall no longer defile the homes of the people. This noble triumph has been won by the persevering labours of Mr. Walker, a member of our profession. His name will be associated in history with this great reform. In the same register that records the patriotism, the benevolence, and the sacrifices of a Howard and a Jenner, future generations will read the name of Walker. Already we find the public have exhibited a sentiment of gratitude for his labours, and have commenced a subscription, to express, however imperfectly, their sense of his unparalleled services. We hope that this subscription may be large enough to be honourable to the public, however it may fail to do honour to the man. The Government has not thought it necessary to recognise Mr. Walker's labours; and, although we cannot feel otherwise than disgusted with such ungenerous neglect of one of our hard-working brethren, we are of opinion that this unjust treatment will only recommend that gentleman's claims the more strongly to the country. We must lose no opportunity of maintaining the public claims of medical men, for, in so doing, we defend the honour of our profession.

HALIFAX "MEDICAL PROTECTIVE SOCIETY."

The late frightful case of malpractice at Halifax has been productive of an event which promises to have no small influence on illegal practice of all kinds. It will be seen, from a letter which we published last week, that the medical men of Halifax, scandalized by the gross ignorance of an illegal practitioner, have commenced a movement which has for its main objects the collection of funds for the purpose of prosecuting unlicensed persons, and the formation of a Society, the members of which bind themselves, by mutual compact, to refuse to associate with any person practising illegally or irregularly.

The Society thus formed will fulfil, it appears to us, a threefold object. It will form a Medical Registration for Halifax, and will place before the inhabitants of that town the names of those who are really deserving of confidence. It will also become a kind of ethical club, which will regulate the conduct of its members in their intercourse, not only with illegal practitioners, but, to some extent, with each other. It will also probably become the medium through which the profession at Halifax can express its opinion on questions of medical policy.

In addition to these weighty duties, the Society intends to aim a direct blow at quackery, by the prosecution of illegal practitioners. This is a bold, yet a wise measure. It may be, in the first instance, only partially successful. We know not if, in the present defective state of the law, it will be possible to convict in any but a most glaring and unusual case. The Society may, then, be de-

feated in the courts of law; but even this defeat will turn to victory. For a prosecution commencing in such a movement, and owning such an origin, is a public protest of enlightened men against what they consider to be a dangerous and fatal error. The force of this protest against the absurdity of allowing any ignorant booby or unscrupulous knave to tamper with the most difficult calling a human being can pursue, will not be lost by a display of the sophisms of lawyers or the uncertainties of law. If the example of Halifax be followed, as it ought to be, we shall have, in every town in England, this subject of unlicensed practising brought clearly before the minds of our sensible and educated middle class.

This universal movement of the profession,—for universal we trust it will soon become,—must produce a great effect upon the public, who have been led by our apathy to regard quacks as almost legitimate members of the profession. But, when the true facts of the case are laid before them,—when the immense difficulties which beset the study of the healthy and diseased frame are pointed out,—when it is urged upon them how laborious must be the life, how intent must be the study, how skilled the eye, how practised the judgment, of the man who would use aright those tremendous agents which Providence has spread over the globe, and with which we neutralize, and antagonize, and repair the ills to which our feeble bodies are subject,—when it is over and over again proved in courts of law, that men without training, without even attempt at understanding the fabric with which they meddled, have yet dared to assume duties which it is obvious they never can fulfil, any more than a country boor could guide a ship through the dangerous shoals and sand-banks of the British Channel,—then we say, when these facts are reiterated through all parts of the kingdom, we shall find our countrymen only too eager to cry out to the Legislature for protection against these dangerous pretenders, and for the application of definite tests, by which those who have qualified themselves for treating disease, may be distinguished from those who have assumed the garb of the hierophant without passing through the indispensable initiation.

It is certainly evident that the Society must be judicious in their choice of cases, and must not allow their opponents to raise the bugbear cry of persecution. Persecution indeed! to bring a knave, who pretends to knowledge he has not, to the bar of his country's justice. Persecution! As if the man who runs his steam-packet on the Irish coast, and drowns a hundred people, is one whit more deserving of the trial which most assuredly awaits him, than the man who enters a town, and, by all sorts of lies and daring braggadocio, imposes upon the credulity of the ignorant and the weak, rifles their pockets, and sometimes takes from them what never can be regained—their health, or possibly life itself. Persecution! If it be persecution to expose falsehood, and to prevent suffering, and to save lives, then we desire no more honourable title than that of persecutor.

We do not apprehend, however, that this outcry of persecution will be found very dangerous. The prosecutions by the Halifax or other kindred societies will be simply appeals of science against ignorance. The age is too enlightened not to hear them,—is too advanced not to discriminate between the actions of a discerning knowledge and the indiscriminate proceedings of a fanatical zeal.

We shall watch the proceedings of the Halifax Society with the greatest interest. If they can hold to the words of their motto, and act in "unity and amity" with each other, they will render a great service to all their professional brethren. It will be the commencement of the practical crusade against quackery. The Halifax practitioners have done right to adopt the courts of law as the arena in which they can most publicly display the unanswerable reasons which demand that the Legislature should secure, by stringent enactments, the lives of its citizens from the tricks of ignorant charlatans.

HOSPITAL FORT PITT, CHATHAM.

We have recently observed a paragraph in the *United Service Gazette*, seeming to censure the medical authorities at Fort Pitt, Chatham. It was there stated, that more than a thousand invalid soldiers were, at a great expense, waiting for medical certificates and their final discharge. Fully aware of the excellent system and regularity observed in the medical department of the army, we felt satisfied that our military contemporary had arrived at his conclusions upon insufficient data; and a letter from Dr. Henry, in the *Times* of Wednesday the 11th, shows that, instead of this large number of uncertificated invalids, this gentleman had, almost single-handed, gone through the Herculean task of examining these troops, not one of whom remains undisposed of. The numbers are highly interesting in a statistical point of view:—Since the 1st of May, 1358 invalids from all stations (including the worst of those wounded in the Punjaub campaigns) have arrived at Chatham; of these, 1196 have been finally discharged the service; 157 have been sent back to their regiment as fit for further service; and 33 have died. The chief labour connected with this duty was performed by the deputy-inspector, Dr. Henry.

MEMOIR OF JOHN GREEN CROSSE, F.R.S,

There is scarcely a town in England, the metropolis excepted, which can claim so many distinguished surgeons and physicians as the old city of Norwich. The names of Martineau, of Rigby, of Dalrymple, and of Crosse, have each established for itself a world-wide reputation, and the laurels so worthily placed upon their heads have now taken root in their ancient city. It is surely an honourable boast to make, that of having been the scene of the labours of men who have done so much in their generation to ameliorate the sufferings of mankind.

John Green Crosse was, we believe, the son of a substantial Suffolk yeoman, and was born in the neighbourhood of Stowmarket. We have not succeeded in obtaining any particulars of his early history until he became the pupil of Mr. Bailey, a highly respectable practitioner of Stowmarket. Whilst with that gentleman, an incident occurred which was singularly characteristic of the energy of character and indomitable perseverance, which formed a substantial element in the subsequent success of the subject of our memoir. He was one day rambling through the fields, and tried his skill in leaping, by attempting to jump over a dyke. Unfortunately, he failed to clear it, and, coming with great force against the stump of a tree, broke one of his legs. Like the celebrated Percival Pott under similar circumstances, he determined to turn to account the confinement which necessarily followed this untoward accident, and engaged a master to instruct him daily in the French language, as he lay in bed. Thus, when, at the expiration of six weeks, he was released from his imprisonment, he rose with a competent knowledge of a language which, in after life, he found invaluable, although, five-and-forty years ago, the extremely limited intercourse with the Continent rendered French less fashionable, and somewhat less necessary, than at the present day. Undismayed by his sufferings, as soon as the bones had firmly united, he returned to the spot where the accident had occurred, and, by jumping cleanly across the ditch, triumphantly redeemed his saltatorial reputation, which he felt had been somewhat tarnished. On another occasion, in after life, when he had broken a clavicle, he

persisted, in spite of every remonstrance, in undertaking a long coach-journey, to be present at one of the earlier meetings of the Provincial Association, and suffered greatly in consequence.

To return to the point whence we diverged. On the termination of his apprenticeship, Mr. Crosse proceeded to London, and pursued his studies with great assiduity at St. George's Hospital and the Windmill-street Anatomical School, taking up his abode in Queen-street, Windmill-street, where, by the way, he endured a smart attack of illness, for which he was attended by an intimate friend, Mr., now Sir Benjamin, Brodie. Like many other brilliant characters at the outset of life, Mr. Crosse had, at that time, to struggle against pecuniary difficulties, his means being so limited, that he was compelled to practise the strictest abstinence and frugality to maintain his ground, and meet the necessary expenses of the Dissecting-room, which in those days, from the scarcity of subjects, and other circumstances, were very high. In the words of one who knew him well, "a penny roll with milk constituted his breakfast, and a sum of money furnished him with clothes for the year, which would scarcely supply some of the students of the present day with boots." He was an assiduous and very skilful dissector, and used in after life, to point with honest pride to a preparation of the eye and orbit, exhibiting minute and careful dissection; telling his pupils, when instructing them in his museum, with what joy he completed this dissection at three o'clock in the morning, having determined to finish it before retiring to bed. This (if we are not mistaken) is the preparation described and figured in the memoir "On the Best Means of closing Anatomical Preparations," communicated by Mr. Crosse to the "Transactions" of the Provincial Association. As a specimen of minute and clean dissection it is probably equal to that from which the very beautiful model of the same parts, in the museum of Guy's Hospital, was copied, and higher praise cannot be bestowed upon it.

Whilst in London, Mr. Crosse formed an intimacy with some kindred spirits, including Sir Benjamin Brodie and Sir Charles Bell; with the former he continued on terms of friendship throughout life.

It happened that when Mr. Crosse had completed his studies in London, and was undecided as to his future proceedings, the celebrated Dr. Macartney was lecturing in the anatomical school of Trinity College, Dublin, and, being in want of a demonstrator, wrote to Sir Benjamin Brodie, then rising into notice, to recommend him a sound anatomist for the post. Mr. Crosse was at once selected, and speedily joined Dr. Macartney, to whom he gave the greatest satisfaction. Desiring to possess the diploma of the Dublin College of Surgeons, he presented himself for examination. What the precise cause of the rejection which followed might have been, must be matter of conjecture; but it was currently reported at the time to have been the result of jealousy on the part of certain influential persons; it is possible, however, that Mr. Crosse, strong in his knowledge of anatomy, was over confident, and neglected to prepare himself for the really severe ordeal,—an ordeal which, as nearly as possible, resembled the junior examination for the Fellowship of the London College of Surgeons as now conducted. It is more dangerous to under-rate an examination than to over-rate it, and it so happened that one point on which great stress was laid was the minute anatomy of the eyelid. In those days the microscope was in far less general use than at present, and a young man might well be excused if less familiar with the microscopic appearances of tissues than an examiner who had paid particular attention to the subject. The charge of partiality or unfairness is, however, often brought where, if the whole truth were known, there are other and very sufficient reasons for rejection. But it must be admitted, that the real test by which a man's acquirements should be judged of, ought to be his sound general knowledge and professional attainments, rather than familiarity with a few insignificant matters of detail, which are often points of dispute, and not less frequently of no importance whatever in their practical bearings.

That the wounded feelings of Mr. Crosse met with sympathy, is proved by a highly flattering address having been presented to him after this disappointment, signed by every student then attending Dr. Macartney's school.

Soon after, by the advice of the late Dr. Rigby and Sir B. Brodie, he went to Paris, where he passed the winter of 1814, and eagerly availed himself of every opportunity for observing the practice of the French surgeons and obtaining information. He was much in the society of Dupuytren, and made the acquaintance of Pinel, Roux, Orfila, Magendie, Beclard, Milne Edwards, Breschet, Serres, and Desportes.

We are enabled, through the kindness of the gentleman to whom it was addressed, to lay before our readers a very interesting letter written from Paris shortly before Mr. Crosse's return home. At that time, and in some of his early publications, he dropped the terminal *e* to his name, but resumed it in after life. The name had been spelt *Crosse* for many generations, as there are ancient deeds to testify:—

"No. 13, Rue d'Orleans, St Honoré à Paris.

"Dear Sir,—I have never lost sight of the hints you gave me when I last saw you, respecting the objects to which I should chiefly direct my attention at the Parisian schools, and I had made up my mind to write to you on the following subject, before I received your kind letter, which only reached me to-day. Venereal patients are not admitted into the general hospitals here,—they are sent to the 'Hôpital des Vénériens,' which is large enough to contain above 500 beds. It is two or three miles from my lodgings, and I was forced to make a second attempt during the severe snowy weather before I could arrive there at *half-past six in the morning*, which is the hour the surgeons make their daily visit. This is the only Institution I have seen in Paris which seems to be conducted badly, and in a way which cannot answer the end for which it was intended, viz., to contribute to the comfort of the sick and the cure of their diseases, and to afford opportunities to students of acquiring practical information. The men and women are visited at the same time by different surgeons, and therefore I could only see the former. 225 of the patients were seen, examined, and prescribed for by M. Cullerier, the *Chirurgien en Chef* in the short space of *one hour*. I had no time to dwell upon individual cases. There was one case, however, that was pointed out to me as extraordinary, and to which I gave some attention; it appeared to be a cancer of the tongue, which was greatly enlarged, ulcerated on all its upper surface, and affording an offensive discharge. From the history of the patient, the surgeons had not been able to learn that he had had chancre, bubo, or lues in any form, yet they had received him into the hospital, and begun a few days before to give corros. sublimate. There was a man with diseased clavicle under similar circumstances both as to the history and the treatment. I saw many patients with chancre, bubo, ulcerated throat, and sores about the anus, drink their potion of decoct. liquor. and corros. sublimate. I was surprised to find hardly an instance of venereal eruption, and there was not one patient with his nose destroyed by ulceration, or fallen in from the top, or loss of the bones of the face, which is so often to be met with in London Hospitals. I was so disgusted with the Institution, and found I could gain so little of that kind of information which I wanted, (the information which embraces the history, present symptoms, and treatment,) that I have not repeated my visit to M. Cullerier. I have, at other hospitals, had many opportunities of seeing surgeons decide on *venereal cases*. I have often put a question as to the diagnostic marks of that disease, without once getting a satisfactory answer, and the conclusion I have drawn from my own observations upon cases which I will not annoy you by relating is, that for an eruption or ulcer in any part of the body, preceded by either gonorrhœa or chancre, which does not yield to ordinary treatment, the French surgeons employ mercury, under a belief of its being venereal, and, if it *yields to this treatment*, they are confirmed in their opinion; the *last*, indeed, seems to be the touchstone whether a disease, be of a syphilitic origin or not. There are many surgeons in Paris who have read the English works on diseases resembling syphilis, but I have not seen one who is acquainted with them practically. The best information I have been able to get respecting the French method of treating syphilis is from three or four of the most respectable young surgeons with whom I have been fortunate enough to become acquainted. The cure of primary symptoms, and even sore throat, is almost constantly entrusted to corros. sublimate and decoct. liquor., and if they employ *frictions*, it is in affections of the bones, or cases where the disease has been long neglected, or where, after the use of corros. sublimate for a time, it seems not to yield to that remedy. That they cure a great proportion of their secondary cases by *corros. sub.* does not surprise me, because there is a sort of fashion here to call doubtful

cases (which would get well, with or without it) venereal; but when I learn that corros. sublimate is given here in primary chancre by the surgeons of most experience, who could not fail to discover soon if it was commonly inadequate to effect a permanent cure, I begin to think, that in England the powers of this remedy are under-valued. The parallel I would draw between the English and the French surgeons in regard to the venereal disease is, that the former is continually meeting with cases which he knows little about, and on which he will not decide till he has ascertained the history, symptoms, and progress of the disease. The latter knows everything at first sight, and decides upon the very slightest grounds that the case presented to him is venereal, and demands the use of mercury. An infant, nine weeks old, was brought by its mother to Dubois to-day, with a crustaceous eruption on the forehead. Without asking a question, or examining the child nearer than a distance of three yards, he told the woman she and her husband were diseased, as well as the child, and that the same treatment must be adopted for all three. The woman shed a few tears, that seemed very unfeigned, at news she was not prepared for, and retired without further advice. I found an opportunity to examine the child. There was an eruption all over the body, which exhibited light-coloured elevated crusts only on the forehead, and which had existed only fifteen days. The mother persisted in saying that herself and her husband were, she believed, free from disease. I know I am better employed in sending you any few observations on what comes before me, than in writing them in my own memorandum-book; and I ought not to neglect to do it if you derive the least amusement from them. I do not spend my time in penning a formal letter to you, knowing that you will attribute my negligence to the right cause, and excuse it. I am tormented with more opportunities than I can embrace; and, as I shall leave Paris in a fortnight, I hardly know which way to turn myself to make the most of my time, which is much shorter than I could wish. All that I see here is not good practice; but I sometimes come home so well satisfied with the observations I have made during a badly-conducted operation, that I feel as if I had gained from it as much as if it had been performed in the very best manner. I have bought a quantity of gum catheters for you, and shall run the chance of taking them with me, although I cannot learn positively whether there be a heavy duty now, or what quantity I may be allowed to take with me as a medical man.

"Believe me, my dear Sir, to be
Most gratefully and sincerely yours,
"John Crosse.

"February 13, 1815."

The impression left on Mr. Crosse's mind by his visit to Paris was, that all English students who had employed their time well in England and were thoroughly grounded in the good doctrines of our schools, derived much advantage from a visit to Paris, and he was in the habit of advising his pupils to go there, saying that their education would not be complete without. Even at the present day the facility with which subjects may be obtained at Paris at a small cost is a strong inducement to young English surgeons to pass some time there, for the purpose of acquiring that practical familiarity with operative surgery which inspires confidence, imparts freedom and facility of manipulation, but can only be gained by personal experience in that department. On the other hand, many are disposed to overrate the continental schools at the expense of our metropolitan establishments, on the ground that the instructions abroad are more elaborate, and dive more deeply into the mysteries of nature and philosophy. The following remarks by one of the most enlightened and deep thinking of our British surgeons, who is honoured not less highly than deservedly, abroad and at home, and who was intimate with the subject of our memoir during the whole of his professional life, cannot fail to be read with interest:—"It is one advantage arising from the peculiar constitution of the London medical schools, that with few exceptions the instructions which you here receive, have in a greater or less degree a tendency to practice. The ambition of the teacher of anatomy is not limited to success in his present vocation. He looks forward to the time when his profession as a physician or a surgeon will elevate him to fame and fortune. His mind is naturally directed to those inquiries, a proficiency in which will most assist him in the attainment of these objects; and that which is useful to himself cannot fail to be useful to his pupils. I have no doubt that the praises which are bestowed on some of the Continental anatomists are well founded; that there are universities in which the anatomical professors, devoting their whole time, and industry, and intellect to this one pursuit, explain the mysteries of minute anatomy at greater length and with more precision than the teachers here; but, nevertheless, I assert that ours is the better method with a view to the education of those who wish to become, not mere philosophers, but skilful and useful practitioners."(a)

Mr. Crosse, on his return from Paris in March, 1815, went to Norwich, and, on the strong recommendation of the late Dr. Rigby, determined to settle there. During his residence in the French capital he had corresponded with Sir B. Brodie and other friends, and was now urged by them to communicate to the public the information contained in his letters. Accordingly, he soon after published his "Sketches of the Medical Schools of Paris," a work bearing evidence of close observation and judicious discrimination. He describes, with clearness, the weak points of French practice, and dwells upon features which might be introduced with advantage into our hospitals. The appearance of the work was judicious, as it supplied information which was much needed, and it contributed to bring the author's name into favourable notice.

In 1816 Mr. Crosse married Miss Bailey, the daughter of his friend and former master. For about two years after this, his progress was so slow, and so little in accordance with his ambition, which was ever strong, that he was on the point of accepting an offer made to him of accompanying Lord Amherst's expedition to China, as surgeon to his lordship's vessel. Fortunately this scheme was overruled by the advice of Mr. William Stark, who was to the last, one of his best and most valued friends. This gentleman had early perceived his superior abilities, and urged upon him that time and patience were alone required to bring success. Soon after, an opportunity was afforded for performing some of the capital operations in public; his coolness and dexterity established confidence, practice followed, and henceforward his rise was rapid.

Though for many years he made a point of attending to every call whether from rich or poor, his pen was not idle: in 1819 he published "A History of the Variolous Epidemic of Norwich,"—a work which deservedly attracted much attention.

On the 27th of October, 1821, Mr. Crosse sustained a great loss by the death of his warm and influential friend, Dr. Rigby; and was requested by the Norwich Philosophical Society to write a biographic sketch of their deceased President. On the 13th of December following this was read before the Society, and was appended to the sixth edition of the Doctor's "Essay on Uterine Hæmorrhage," under the title of "An Eulogy upon Edward Rigby, M.D." It would be foreign to our purpose to dwell at any length on this tribute of respect; but we cannot forbear to mention, that Dr. Rigby was in Paris in July, 1789, and was an eye-witness to some of the most frightful atrocities of that sanguinary period. On the 14th, whilst walking along the streets, he met a large body of people with two bloody heads raised upon pikes; one was the head of the governor of the Bastille, who, having surrendered under the most solemn pledges of personal security and protection, was immediately and most barbarously murdered; on the following night, Dr. Rigby could not forbear, though at some personal risk, to gratify his curiosity by walking through the streets, and, to use his own words, "Every now and then a party passed who came from the Bastille. They had released some prisoners,—amongst them an aged count, who was found in one of the deepest and most inaccessible dungeons; he had been confined forty-two years, and was a major of cavalry; he was dressed in a greasy reddish tunic,—his beard had not been shaved,—and his hair, which had not been combed during the whole period, was grown very long, closely matted together, and divided into two parts, reaching on each side to his knees,—so that he presented a most extraordinary appearance." This account, by an eye-witness of one of the most singular events of the Revolution, is full of interest, especially as it gives a very matter-of-fact description of the sufferer, differing somewhat from the romantic accounts elsewhere, and not a little from the figure, familiar to all, now in Madame Tussaud's Exhibition. It was not without much difficulty, and after several failures, that

(a) Introductory Discourse, by Sir B. C. Brodie, 1838.

the Doctor made his escape from Paris, and returned to his native city, of which he was long an ornament. It is singular that one so prominent in the obstetric department should have a remarkable birth in his own family. On the 15th of August, 1817, Dr. Rigby became the father of three boys and one girl by a single birth! It had long been an object with Mr. Crosse to become attached to the Norfolk and Norwich Hospital, and in July, 1823, he obtained the appointment of Assistant-Surgeon to that institution; on the death of Mr. Bond, in 1826, his ambition was further gratified by his succeeding to the Surgeoncy,—an office he filled for many years with the utmost honour and *éclat*.

However great a man's confidence in himself may be, there is, probably, no one who does not feel some anxiety and misgivings previous to the performance of his first capital operation, and not less on making his *début* as a lithotomist. Soon after Mr. Crosse's appointment, an opportunity was afforded him of proving his skill in that branch on a fine rosy child of five years old, who rejoiced in the name of Titus Cutting. Unfortunately for himself, Titus was afflicted with the stone, and came into the hospital to have it removed. So healthy did the lad look, that Mr. Crosse remarked, it only required workmanship equal to the materials to make a successful case of it. Mr. Martineau was the only one of the surgeons present at the operation, and if any man could inspire confidence in a young lithotomist, it was that veteran. The child was placed in a proper attitude. Mr. Martineau held the staff, and Mr. Crosse, plunging in his scalpel, cut so deep that the venerable assistant remarked that he had gone far enough, and had no doubt freely divided the prostate gland. The scalpel was withdrawn, and the blunt gorget introduced—it slid readily into the bladder; so far good, but on the operator pushing his little finger into the wound, no stone could be felt. He then introduced his fore-finger, not without difficulty and some anxiety, and was greatly relieved by at once touching the stone, which was readily extracted with a pair of small forceps. As Mr. Crosse wiped his hands, he was congratulated by Mr. Martineau on the successful progress of this, his maiden operation for the stone, and records with reasonable pride that it lasted but one minute and a half. The patient made a rapid recovery, and on the sixteenth day was discharged cured.

It may well be supposed that in such a long and active career as that passed by Mr. Crosse, numerous strange and obscure cases fell under his notice; but there were none which caused him more embarrassment for a short time, or were more instructive, than the following:—

A child, a year and a half old, was brought, on account of frequent inclination to micturate, attended by painful straining. He was sounded by Mr. Crosse, but no stone could be felt. The little patient became rapidly worse; his torture was so great that without opiates he obtained neither rest nor cessation from suffering. From time to time the bladder was sounded, but, though something could be felt, it was far from clear that it was a stone. The poor child was, however, rapidly sinking under the disease, and it was decided that an operation should be attempted for his relief. An experienced surgeon held the staff, and was positive as to the existence of a calculus; Mr. Crosse therefore commenced by cutting boldly down upon the staff. As soon as the membranous portion of the urethra was opened, a semi-transparent substance appeared in the wound, resembling the mucus the child had passed by stool, and it immediately occurred to Mr. Crosse that, for the first time in his life, he had wounded the rectum. This was an unpromising commencement, but, undismayed, he introduced his forefinger, and carried the scalpel forward, fairly to the neck of the bladder. To his utter horror and consternation, and not less to that of the bystanders, the wound instantly became filled with a mass resembling, he says, what one would have expected to see had he opened the peritoneum and allowed the processus vermiformis and several folds of small intestine to protrude! Such was the momentary frightful impression that held the mute attention of himself and all who were present; he pushed back the protruded parts and carried his finger into the bladder, where he could find no stone, but soft, tumour-like bodies, which protruded again on the finger being withdrawn; a minute inspection discovered that these were soft polypous masses growing from the inside of the bladder, and resembling in structure the mild polypus nasi. As many were removed as could be conveniently reached; but the wretched child continued to have violent fits of vesical tenesmus after the operation, and was happily released from his sufferings in forty-eight hours. *Post-mortem* examination showed that the bladder was still filled with tumours growing from the lining membrane, and situated at the inferior part near its neck.

Men of very great experience and renown have operated expecting to find a stone when there was none: Cheselden thrice lithotomised and found no stone; Dupuytren and Roux have done the same; and Mr. Crosse was present, or had notes, of not less than eight such cases occurring to practitioners within his own sphere. In the above case he operated contrary to his own judgment, rather with the *hope* of affording relief than the expectation of finding a stone loose in the bladder, though it was possible there might be one or more, encysted.

Other singular cases came under the notice of Mr. Crosse; for instance, a calculus weighing 8 oz., which was removed from the scrotum of a man thirty-six years of age, and which probably made its way by ulceration from the urethra. In Graefe and Walther's Journal, however, there is an account of a schoolmaster, who was tormented for twenty years with a calculus in the scrotum, which he supported in a bag; at length it got to such a bulk, that, during exertion at stool, it ruptured the scrotum, and escaped. This weighed 26 oz.!

The fifteen years which succeeded the appointment of Mr. Crosse to the hospital were marked by a steady increase of practice and reputation. His daily labour became great, but his energy was fully equal to it, and we must leave him for the present, deeply immersed in the toilsome but honourable occupations of a most prosperous provincial surgeon.

[To be continued.]

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

THE MICROSCOPIC EXAMINATION OF THE HUMAN KIDNEYS.

A very able paper, by Wittich, of Königsberg, on this subject, appears in Virchow's Archiv. Since the excellent histological observations of Bowman, the attention of anatomists has been much directed to the microscopic structure of the kidney, and men of great reputation have held Bowman's observations to be altogether true, to be partly true, or to be untenable. The ground of this difference of opinion appears to lie in the extreme uncertainty of all present methods of examining kidneys; in the difficulty, at any rate, in the higher vertebratæ, of injecting both the renal tubes and the blood-vessels; and in the necessary displacement and tearing of parts, which is inevitable with the most skilful maker of sections. If, to avoid some of these difficultics, the organ is dried, the parts shrink, and become so coloured with exuded hæmatine, that the difference between renal tubes and blood-vessels is not discernible. In order to get rid of these difficulties Wittich pursues the following plan:—He immerses thin sections of the kidney in very dilute hot nitric acid, (a) boils them gently, and then, after removal, dries them in the air, or by the aid of heat. The hæmatine remains with the coagulated albumen in the vessels; the coagulation of the albumen of the tissues prevents their shrinking, and now with the greatest ease thin sections can be made, the only precaution being, that a wetted knife must be used, otherwise the dried tissue crumbles before it. The thin sections usually roll up, but can, after being wetted with water, or, what is better, with a dilute solution of carbonate of potash, be easily unrolled and placed on the glass. If a section be made in the direction of the axis of a pyramid, through the cortical and medullary substance, the straight tubes can be seen passing along to the base of the cone, and then winding into the cortical substance. Where they commence to become tortuous they increase visibly in diameter; as the windings take a tube into several planes, it is never possible, in very fine sections, to follow a tube for any distance. For the same reason the forking or division of a tube in the cortical substance is very seldom seen, but can, however, sometimes be directly observed. Canals ending

(a) Acetic acid may also be used, and makes the parts very clear.

in blind extremities are never seen. The blood-vessels are seen running, or in the cortical substance winding, between the tubes, and are easily distinguished by their colour from the nearly transparent renal tubes. The vessels are attended by much areolar tissue, but, beyond this, no trace of any intertubular or connecting tissue can be seen; the field is occupied entirely by blood-vessels and tubes. There is no fibrous matrix. Malpighian bodies are not found immediately under the renal capsule; they are found some little distance below, and in fine sections, under weak powers, appear as perfectly round dark brown-red spheres. With a thicker section the whole Malpighian body can be seen, with its capsule; the artery can be clearly observed entering, and in some cases winding, in the interior; in other cases the capsule is filled with a brown-red substance. In many cases also Wittich could satisfy himself, "with the greatest precision," that the capsule was an offshoot from the wall of a renal tube, as Bowman has described it. The Malpighian bodies were seated at the end of the tubes, and Wittich could never observe that, as Gerlach states, there were attached capsules to the sides of the tubes; but he does not deny that such may be the case, as an arrangement of this kind is seen unequivocally in the fresh kidneys of fish. Wittich has at present only examined two diseased kidneys by this method. The first case was one of Bright's disease, *i. e.*, the kidney being small, and with stellate cicatrized contractions of the cortical substance. It was free from blood, and under the capsule presented the well known coarse-grained aspect. While in sections of healthy kidneys, prepared on the above-mentioned plan, the whole field is occupied with closely lying renal tubes and blood-vessels, in this kidney, on section of the cortical substance, nothing was seen but a structureless granular mass, and here and there dismembered coils of tubes, or large islands of such coils, surrounded by a granular mass. The canals themselves, which still existed, neither in respect of their diameters, nor anything else, appeared altered. The number of the Malpighian bodies was very much lessened, and appeared to correspond to the number of the still-remaining canals; they were filled with granular contents, and their capsules were thickened. The stellate contractions showed no canals at all; all had disappeared; and nothing was seen but a structureless substance. The medullary substance showed further nothing abnormal. In the second observation, there were numerous abscesses in the kidney, from the size of a millet seed to a pea, both in the medullary and cortical substance, but chiefly in the latter. The substance surrounding the abscesses appeared normal to the naked eye. When the kidneys were hardened by the acid, and sections made, the surrounding tubes were, however, found more or less filled with an amorphous mass, which also existed between the tubes. Little infiltrated oval or linear spots were also seen, which appeared to be the commencements of the abscesses, and were produced by infiltration into and between the tubes of pus and granular cells crowded with fat, so that Wittich concludes that, in this case, in consequence of a disease not further alluded to, an exudation or extravasation occurred, in and between the renal canals, which produced, by the hindrance given to the circulation, a destruction of the canals and Malpighian bodies at these points. The exudation softened at its centre, while at its periphery it gradually extended, and involved new parts in the destruction which necessarily followed.—*Virch. und Reinhardt's Archiv.*, 1849, pp. 142 to 153.

PRESERVATION OF LIFE AFTER THE PARTIAL DESTRUCTION OF THE SPINAL CORD.

The following interesting experiment is reported by M. Brown-Sequard. He took two pigeons of the same age, and, as nearly as possible, of the same weight and dimensions, and destroyed in one of them the whole of the spinal cord from the fourth dorsal vertebra to the tail. Each pigeon was fed with the same aliment, and had an equal quantity of water given it; the excrements and urine of each were carefully weighed every day. Every five days the animals themselves were weighed and measured. The pigeon in whom so great a portion of the spinal cord was destroyed was nourished as well as the other and grew as rapidly; its animal heat was preserved, and its feathers were formed as perfectly as usual; in fact, the destruction of the cord to this extent exerted no influence whatever on the heart, the lungs, the stomach, the urinary secretion, or the animal heat. —*Gaz. Méd.*, Juin 29.

CONSERVATION OF REFLEX MOVEMENTS AFTER CONSIDERABLE DESTRUCTION OF THE CORD.

Some experiments bearing on this subject are also reported by Brown-Sequard. The spinal cords of two pigeons were cut through, on a level with the last costal vertebra, and a metallic stilette was then thrust down the cord to the second or third caudal vertebra. In one pigeon, there occurred, after this operation, feeble but quite manifest reflex movements in the posterior extremities and the tail; they lasted for many days, till, in fact, the animal was killed. At the autopsy, the whole posterior face of the cord was covered with coagulated blood; the cord was flattened from before backwards, was softened in its whole thickness, and presented in various places a red vinous colour, doubtless attributable to sanguineous exhalation. The grey semi-liquid substance in the rhomboidal ventricle was destroyed; the posterior columns were almost entirely separated from each other, and the central grey substance was laid bare. In the other pigeon there were reflex movements only in the *left* hind leg and the tail, but none in the *right* hind leg. At the autopsy, the whole right half of the cord was found to have been completely destroyed; the *left* half was red and softened. This proves a fact hitherto noticed only in the cold-blooded animals, viz., that half of the cord is sufficient to preserve reflex movements in the corresponding extremity. —*Gaz. Méd.*, Juin 22.

HYDRO-IODIC ETHER.

It is now some twenty-five years since Gay-Lussac discovered hydro-iodic ether; yet this substance, though so volatile and rich in iodine, has never been employed medicinally. M. Hurette thinks that it is a powerful remedy, which has been unaccountably neglected, and has performed numerous experiments for the purpose of determining its physiological effects.

The mode of administration is simple; one or two scruples of the ether are introduced into a small bottle, and then covered with an extremely thin layer of water. The bottle is next applied to the nostril, and inspiration effected, the ether passing up through the aqueous covering. Fifteen or twenty inspirations are sufficient. Absorption takes place so rapidly that iodine may be discovered in the urine a quarter of an hour afterwards.

The physiological effects on the economy are those of iodine carried to their highest degree, yet the author never experienced any other inconvenience after numerous trials than a slight coryza.

It does not appear that M. Hurette has made any clinical experiments with the hydro-iodic ether, but he has proved that it may be employed without any inconvenience, and analogy warrants us in recommending it to the notice of the physicians attached to the Brompton Hospital.—Abridged from the *Gazette Médicale*, No. XXX.

PELLAGRA.

This cutaneous malady is endemic in several parts of the south of France, as well as in Spain and Italy; but, generally speaking, it has been mistaken by the local practitioners, who seem to have considered it rather as an insignificant complication of some internal disorder than an independent disease of the skin. In the Valley of Vernet, bordering on the Pyrenees, many cases have occurred. Within the last twenty-five years a single physician has met with fifteen cases, at least, in a population of less than 2000 souls; yet, strange to say, none of the hospital physicians at Perpignon, Montpellier, or of the county lunatic asylums adjacent, have ever had a case under their care.

The symptoms of the disease are generally uniform. It commences with an erythematous eruption on the backs of the hands, soon ending in the formation of small scales, and attended by severe itching under the influence of the sun. Sometimes, before the appearance of the eruption, more frequently soon after it, the general health of the patient suffers in a remarkable degree. The digestive organs and nervous system are chiefly attacked. The general symptoms are loss of appetite, pain in the stomach, with diarrhœa, headache, vertigo, general weakness, and pain along the spinal column. These disappear with the eruption in winter, to recur in summer, and are aggravated each successive year, until the patient is cut off,—a termination which occurs in three or four years, from diarrhœa or some nervous disease.—*Gazette Médicale*, No. XXIX.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

THE ACADEMY OF MEDICINE

has removed from its old *locale* of the Rue de Poitiers, into a magnificent mansion, situate in Rue des Saints-Pères. I wish the Berners-street authorities could see the difference between the two establishments. Yet the Academy is certainly not much richer than the Medico-Chirurgical. A brief notice of the new Academy may perhaps be interesting.

A Grecian portico, of somewhat questionable taste, surmounted by Esculapius in a sitting posture, leads to a fine vestibule, supported by six Ionic columns; around are arranged numerous pedestals, bearing busts of all the "celebrities" of French Medical science —Portal, Dessault, Dupuytren, Cuvier, Broussais, and others. From the vestibule you pass, by two doors, into the amphitheatre. This is a vast, nearly semicircular room, divided into two parts; one elegantly furnished with velvet-seated stalls for the academicians; the other, a simple platform for that *profanum vulgus*—the public. In front you have the tribune, with its appendages, and behind, in a niche in the wall, a small box, where the journalists are to perch, just like saints over the door of a convent. The amphitheatre is ornamented with a great number of pictures—some new, others old—over the tribune hangs the well-known "Leçon d'Anatomie," from the pencil of Rembrandt. On one side attention is arrested by a very large picture of Müller, representing Pinel striking off the chains from the insane. This composition of the celebrated artist has given rise to much criticism—the insane, it is said, being a very rational-looking set of subjects, and the portrait of Pinel anything but a likeness. Esquirol, too, is painted at the age of eighteen, in the nankeen-tights, long flowing hair, stiff collar, and enormous ruffles of the day—in a word, with a costume which renders him a perfect caricature.

The library of the academy is a very elegant—and what is better, well-stocked—square room, the walls of which are lined with oak panels ornamented in gold. A folding-door leads into the garden, as yet in a state of embryo. Finally, two very fine laboratories, furnished with every apparatus which modern science may demand for the investigation of chemical subjects, complete the new establishment of the Academy of Medicine. It is in every way worthy of France. The Academy take possession on the 2nd, when the installatory orations will be pronounced by the president and secretary.

M. Isidore St. Hilaire has been elected to the chair at the Sorbonne, vacant by the demise of M. de Blainville. At Val-de-Grace a school is to be opened for the special instruction of such graduates in medicine as propose entering the army; they will have to pass a couple of years there before being gazetted. M. Levy is to be professor of medicine; M. Baudens of surgery; in short, all the old professors are to be re-appointed.

ANEURISM OF THE AORTA CURED (?) BY GALVANISM.

The following case is so important, that it is extracted with slight abbreviation from the last number (August 17) of the *Gazette Médicale*. Although it may be doubted whether a perfect cure was obtained, it is at least certain that partial coagulation of the contents of the sac was effected, and speedy death avoided, which, under any other treatment, would have been inevitable.

On the 7th August, 1847, a patient, 42 years of age, was admitted into the military hospital of St. Petersburg, under the care of Dr. Balbiani, the head-physician. The chief symptoms were, difficulty of breathing, with a tumour which pointed at the right side of the chest. For two years the patient had constantly suffered from attacks of difficult respiration, with cough. A tumour soon appeared above the right mamma, and gradually increased in size. Even after the patient's admission its increase was so rapid that it occupied the whole surface between the sixth and second ribs, and extended from the middle of the sternum to the axilla. The tumour was globular, elastic, and tense; the skin covering it shining and of a natural colour, except at the upper part, where a blue spot of the size of a crown piece was observed. This point was soft; the pulsations of the tumour were isochronous with those of the heart, whose pulsations were tumultuous, and chiefly felt near the sixth and seventh ribs. The existence of aneurism of the ascending arch of the aorta could not be doubted. As death from rupture of the blue and softened walls of the sac seemed imminent, it was resolved to make a trial of galvano-puncture. Accordingly, on the 15th August, six steel needles, two inches long, were inserted into various parts of the sac, except the blue portion, which was carefully avoided. As experience had shown that it was the zinc pole alone which favoured coagulation, five of the needles were alternately placed in communication with this pole, and one needle with the copper pole. The battery was composed of thirty-two plates, and the current kept up for half an hour. During the whole of this time the patient experienced a severe burning pain in the tumour, and in the whole region of the chest. When the needles were extracted a quantity of hydrogen gas, mixed with a few drops of blood, escaped from each orifice; and those made by the needles in communication with the zinc were evidently cauterized.

The tumour was then covered with lint, moistened with Goulard's lotion, and the patient was ordered a mixture containing digitalis and nitre.

On the following day, the patient had a severe attack of fever, and the integuments covering the tumour were much inflamed. Ice was constantly applied, with such effect, that after the lapse of a week, it was possible to repeat the operation. This was done in the same way as before, except, however, that a single needle was passed through the centre of the blue spot, and the other needles around the spot. Galvanism was applied for half an hour, and produced exactly the same effects as before; they subsided in about ten days.

On examining the tumour now, it was evident that it had gained a considerable degree of solidity. The blue spot had entirely disappeared, and become almost as resistent as the other parts of the sac. On comparing the present dimensions of the tumour with a cast taken on the patient's admission, it was found that the tumour had diminished half an inch in all directions. As the fear of an immediate rupture of the sac was removed, the patient was allowed to leave the hospital on the 24th September, 1849.

This case is certainly one of the most remarkable on record, and opens a vast field for future experiment. It is probable that a complete cure was not obtained. Such a result, in so desperate a malady, was not, indeed, to be expected. On the other hand, it is evident that a portion of the blood in the sac was coagulated; that adhesive inflammation was excited in the walls of the sac; and that, in all probability, union or incorporation had taken place between the inflamed walls of the sac and certain portions of coagula. The walls of the sac were thus rendered firm, and the tendency to yield under pressure diminished, if not altogether overcome. It may not, perhaps, be going too far to say, that the sac had acquired a degree of firmness, which would enable it to resist the heart's impulse for the future. At all events, the results of the case, taking them even as partial ones, were of the most encouraging kind. With proper caution, this new mode of treatment may be applied to internal as well as to external aneurisms. For varicose veins it is most efficacious; and the experience acquired at the Military Hospital of St. Petersburg shows that neither gangrene, phlebitis, nor purulent infection, is to be dreaded, —accidents, the fear of which has hitherto prevented surgeons from having recourse to this powerful agent.

IRELAND.

CHARCOAL AS A DEODORANT.

Considerable agitation has been going on in Dublin, as to the value of peat charcoal as a deodorant in hospitals, barracks, ordinary sewers, &c. Some of our chemical folk lately spoke of the activity of the new material depending on creosote, or at least on some of Reichenbach's compounds existing in the peat itself; but this is not at all likely. Be this as it may, large quantities of the new charcoal are now being made near Dublin; the most fetid sewers and cesspools and bad meat have been at once freed of their noxious properties by it, and it promises to be a most efficient sanitary agent. It is sold at something like 35s. per ton.

A NEW PHARMACOPŒIA

has just been published by the "King and Queen's College of Physicians" in Dublin, which is strictly directed by an order in Council to be used by "all and singular apothecaries and others whose business it is to compound medicines or distil oils, or make any other extracts within this part of Her Majesty's United Kingdom." All persons violating such order to be proceeded against at law.

Notwithstanding the opposition it has lately met with,

THE QUEEN'S UNIVERSITY IN IRELAND

has come out with its new statutes. The senate consists of seventeen of the most eminent men in the various departments of literature, science, medicine, and law in Ireland. The Earl of Clarendon has been appointed Chancellor of the University. The Chancellor and Senate are to prescribe the courses for graduation, and to grant degrees in the different faculties, to appoint examiners of candidates for degrees, and confer scholarships; the three presidents, of course, are members of the Senate; the old laws and statutes remain *ad interim* in force. Much is expected of the new colleges in the approaching session; it is to be hoped, however, they will not quite extinguish old *Alma Mater*, the letters patent rather authoritatively declaring that our friends of Cork and Galway "shall be fully possessed of all such rights, privileges, and immunities as belong to persons holding similar degrees granted them by other Universities, and shall be entitled to whatever rank and precedence is derived from similar degrees granted by other Universities." Among other *on dits*, Old Trinity has just discovered, it is said, that, under the Act of Settlement of Charles II., she has the power herself of forming a University to be called "King's College," to be supported out of the quit-rents of the kingdom. The "blighting influence" of so many universities and colleges, to use a fashionable phrase on the English side of the Channel, must be apparent at a glance.

OPERATION FOR CATARACT.

Dr. Jacob continues his prelections—so very valuable to all practical men—as to the different ways of performing this operation. He seems quite certain as to the superiority of the anterior operation, as he calls it, namely, that through the cornea, as compared to the posterior one through the sclerotic and other essential parts adjoining this coat of the eye. "No anatomist," he says, with a considerable amount of truth, "aware of the nature and number of structures injured in the posterior operation, can for a moment assume, that such injury does not cause more risk of destructive inflammation than the injury inflicted on the cornea in the anterior one; and no surgeon who has compared the effects and consequences of the two operations can for a moment maintain, that the results of the puncture through the sclerotic are not more injurious than those that follow the puncture of the cornea. No man who knows what the penetrated structures are, could venture to maintain, that the conjunctiva, sclerotic, ciliary ligament, and ciliary processes could be traversed by an instrument with the same or less injury than is inflicted in traversing the cornea. And no one who has compared the dimensions and relations of the anterior and posterior chambers of the aqueous humour, could venture to maintain, that the narrow space behind the iris, affords a more accessible passage for the needle, than the comparatively capacious chamber anterior to it." The destructive consequences of the inflammation it produces are also less in the anterior operation. Dr. Jacob operates on his cataract cases, standing behind the patient, as it gives his pupils a better opportunity of seeing what is going on. In the left eye this has, of course, its disadvantages; but in this position, he says he has the most perfect command over the patient's head and eye-lids, and is enabled to bring his eye to bear on the needle and cataract with the utmost precision. It renders him also independent of an assistant. He gives the different steps of his operation with much detail. Wounding the iris, he does not think so dangerous as it is generally thought to be; he advises much firmness during the operation—to make towards your point fearless of consequences. The operation of couching he now thinks must rank the last of the three operations for cataract, judging from a comparison of results. It is interesting to find your correspondent, Mr. Blacklock, of Dumfries, confirming the views of our Dublin School.

Dr. Jacob is not favourable to the ordinary practice of putting patients through a long course of medicine previous to the operation for cataract; and he does not at all see the propriety of exhibiting mercury to salivation. Where the simpler operation of breaking up the lens, as advocated by him, is adopted, very little if any preparation, he says, will be necessary. He states an interesting fact, that the mere irritation of the iris in this operation will often make it contract, so that the practitioner should be on his guard, with plenty of belladonna to dilate the iris, or a solution of atropine, which he has found much more manageable. He recommends as a very useful instrument, a half-inch needle: where a larger one is necessary a $\frac{5}{8}$ths needle perhaps answers all purposes better.

DURHAM.

COUNTY MEDICAL ASSOCIATION.

At a meeting of this Association, Mr. Shaw again strongly advocated the necessity, as well as the propriety, of the introduction of the word "illegal" in the place of "unqualified." Mr. Shaw contended, that an association, composed of legal and illegal practitioners, combined for the purpose of prosecuting those they might consider unqualified practitioners, was an illegal association, and ought not to be tolerated. The question of the legality of an association composed of such materials, was put to Mr. John Patrick, the solicitor, who gave an opinion, that an association so composed was a legal association. This opinion from a lawyer did not satisfy Mr. Shaw, who contended that the association not only indirectly but directly supported and sanctioned those gentlemen who were daily violating the law. It appears, from the statement made by Mr. Shaw, that in the city and county of Durham there are about 220 practitioners whose names are to be found in the "Medical Directory." Of these about 94 are illegal practitioners, and out of these the pure physicians are to be deducted, and also about 48 who appear, from that Directory, to be without any qualification at all. Mr. Shaw's proposition was opposed by Dr. Jones, of Washington, who is himself an illegal practitioner, although an M.D. of Edinburgh; but the only argument he adduced was, that it would be illiberal to form an association on so narrow a basis. The proposition of Mr. Shaw was lost by the casting-vote of the Chairman (Wm. Green, Esq., F.R.C.S.).

The Chairman, before putting the question, made some very strong observation condemnatory of the introduction of the word "illegal." It does certainly appear somewhat strange, that gentlemen who are themselves practising in open defiance of the Apothecaries' Company, should be the first to complain of their neighbour violating the law, when they themselves unblushingly set the example. If the Association is to be of any use to the public, let it avoid sanctioning anything illegal; let members at once, as Mr. Shaw recommended, say to those who are sticklers for prosecuting unqualified practitioners, first put yourselves right, and do not, under the disguise of fine high-sounding titles, deceive the public by daily violating the law.

GENERAL CORRESPONDENCE.

TREATMENT OF PERICARDITIS.

[To the Editor of the Medical Times.]

Sir,—I will, with your permission, offer a few comments on a case of pericarditis, published in your journal for August the 10th. The paper is headed, "Guy's Hospital, by Dr. Charles Kidd. Rheumatic Pericarditis—Recovery." Taken in its immediate and remote consequences, I am not acquainted with any disease concerning which it is of greater importance that medical men should entertain correct notions. The great frequency with which rheumatic pericarditis occurs among the labouring population of large towns, during the early and middle period of life, with the, I believe, invariably permanent injury to the heart which results therefrom, render it peculiarly necessary that all hospital and dispensary physicians should be able to recognise the disease at its commencement, be well acquainted with its progress and modes of termination, and with the treatment best adapted for its relief. It is because I consider the case now under review to be calculated rather to mis-

lead, than to instruct those seeking for information, that I trouble you with the following remarks; nor yet on this ground alone would I intrude on your space, did not the case appear under the apparent sanction of one of our great metropolitan hospitals.

I will quote the case at length, in order to render my criticisms intelligible, merely premising that in what follows I have no desire except to further the cause of practical medicine.

"Margaret B., aged 20, was admitted into Guy's, June 17th, 1850." I here omit history and general symptoms, as not bearing on the matter in hand. What follows is in direct sequence and *verbatim*.

"On passing the stethoscope over the chest, the heart's action is found to be quite natural—the impulse is normal too—a very feeble bruit is perceptible with the first sound, particularly over the valves—not traceable at all along the aorta—the second sound seems free. She was ordered that night pills with antim. tart. and calomel, and a draught for the morning, with senna and vin. colchici; to be kept very quiet, and to get simple drinks; no food.

"18th.—To-day Dr. Barlow saw her—corroborated the previous account—the bruit not at all lessened—if anything, indeed, it is a shade more marked than yesterday. The medicines ordered to be repeated; a mixture with nitras potassæ during the day; her diet to be low, and to go on as before.

"19th.—Feels much the same—still very feverish—the pulse up to 108—all the other symptoms as yesterday; ordered a draught every four hours, consisting of aq. acet. ammoniæ, mist. camphoræ, nitras potassæ, and vin. opii.

"20th.—Feels an acute pain below and to the right of left nipple, between the fifth and sixth ribs, increased on inspiration or pressure—there is also distinct rubbing sound with the systole, when you examine carefully, of a peculiar 'to and fro' character, as it is called—the tongue is still foul—there is much feverishness—the pulse is still holding up to 108—cupping-glasses were put on, and ʒvj. of blood drawn from the cardiac region—(this is all the blood that has been taken during the attack)—to continue her drinks; the calomel and the mixture were also repeated.

"21st.—Complains that she has had a restless night; pain, however, is not so troublesome in the side, and on the whole she feels better; the rubbing sound is singularly well marked. Rept. med.

"22nd.—Feels quite another person to-day—she is much relieved—no pain in the joints—the tongue also is clear—the rubbing sound over the heart still continues—the indications of pericarditis, in fact, could not be better marked.

"23rd.—Has had a restless night, but still in every other way improving. Pergat.

"25th.—Tolerable night—tongue again furred—rubbing sound continues.

"26th.—Complains of 'soreness' in the joints—not so well in her general feeling—bowels relaxed to-day—tongue furred—rubbing sound little, if anything, diminished—seems as if she had taken something not fit for her, but denies that she has done so.

"27th.—Better—her respiration less laboured, and her general inflammatory condition, as evinced by her face, altogether altered.

"28th.—Still improving—bruit is now traceable up along the aorta. Ordered a blister to the region of the heart, and to go on with the last medicines.

"July 1st.—Since last report has been going on favourably. *The friction sound has quite disappeared.* Her other symptoms also improved.

"5th.—Has had some little relapse—not so well to-day. Some general directions given, as she has been making too free. Pericardium all right.

"8th.—Much better than at last report—the gums are sore.

"17th.—All signs of the inflammatory condition of the pericardium have disappeared. Feels quite well.

"23rd.—Going out perfectly recovered."

The *italics* in the report of July 1st are by the author.

We are told, "Of course, the case following in this report, (selected from many others,) under the assiduous care of Dr. Barlow, cannot pretend to much novelty; yet, as exhibiting the more improved treatment at present used, and the general manageableness of such cases, it cannot fail to be of interest." We are justified by the above in considering the case as a specimen "selected from many others."

Now, if we take the language used in describing this case in its ordinary acceptation, there will be conveyed the notion of old endocardial and recent exocardial mischief. This, however, can hardly have been the intention of the author, as there is nothing said throughout the case about endocardial disease; and, besides, it would be very incorrect to say, that a patient with permanent bruit has quitted the hospital "perfectly recovered." We are told first of all of "a feeble bruit with the first sound heard over the valves, not traceable along the aorta,"—these are precisely the words which would usually convey a correct account of common mitral bruit; eleven days later, we are told that "the bruit is now traceable up along the aorta," this gives more the idea of aortic bruit. During all the intermediate days we hear of nothing but "rubbing sounds" and "to-and-fro sounds,"—terms usually applied to exocardial phenomena, and there can be no doubt of the wisdom of thus confining the terms, and restricting the word "bruit" and "murmur" to endocardial sounds.

It is assumed, in the following remarks, that the case was one of pericarditis, uncomplicated with endocardial disease, (which I presume to have been the view of the writer, although, I think, an erroneous one.) On this supposition, we shall find it necessary to come to a very different conclusion as to the state of the patient on dismissal from the hospital from that arrived at by the author. There is a persistent friction sound, at least from the 20th to the 26th, both inclusive; it may be from the 17th to the 28th. On the 1st of July it is stated:—"The friction sound has quite disappeared," and it is assumed, as may be seen from the report, and still more strongly from the remarks appended, that the disappearance of the friction sound is consequent on the resolution of the inflammation and the absorption of the effused lymph. Now, I venture to assert, that this view of the case is utterly untenable. There are three ways, by either of which we may suppose a friction sound, once established, to disappear,—absorption, adhesion, effusion. The first is the only occasion on which pericarditis can be said to be cured, and I confess that, to the best of my knowledge, it is a termination that I have never been so fortunate as to meet with, out of a large number of cases treated in hospital during the last five years. I have paid particular attention to this matter, and I feel assured, that if physicians will take the trouble to follow their pericarditic patients into their ordinary avocations, after their dismissal from the hospital, they will not fail to detect abundant evidence, in *all* such cases, of a permanently impaired heart. To suppose, as our author seems to do, that such an amount of lymph can be absorbed in three days as was sufficient to furnish a persistent friction-sound during at least seven days, is a notion altogether unsupported either by clinical observation or by morbid anatomy. There can be no doubt, then, but that this case terminated either in adhesion of the pericardium, or in effusion between its layers, or partly in both ways, and that the patient quitted the hospital relieved—not cured—with a permanently impaired heart; far from the condition so dogmatically asserted by the author,—"pericardium all right;" "going out perfectly recovered."

In the remarks appended to this case, a good deal of credit is taken on account of the improved and enlightened plan of treatment adopted; I confess that I do not quite perceive the grounds of this laudation, and, as regards the administration of mercury, I think the plan followed an unsound one. Calomel was given on the day of admission, and formed part of the treatment throughout. The system was not brought under its influence until twenty-one days from the commencement. Now, it seems to me, that if mercury is given with the view of controlling the effusion of lymph, or of promoting its absorption, the sooner the system is brought under the influence of that drug the better; and if it is not expected to effect these objects, it does not seem very obvious why it is given at all.

I shall feel obliged by your inserting this communication in an early number of your journal.—I am, Sir, &c.,

William Davies, M.D.,

Physician to the Bath United Hospital.

Bath, August, 1850.

ON MALFORMATION OF THE URETHRA AS A SUPPOSED CAUSE OF STERILITY IN THE MALE.

[To the Editor of the Medical Times.]

Sir,—Having observed, in the journal for August 31st, a correspondent, who signs himself "M.D.," is anxious to ascertain the experience of the profession regarding a malformation of the male urethra as a cause of sterility, I beg to furnish him with a case which came under my observation about twelve months ago.

A married gentleman called on me in great tribulation, as he had not only had the misfortune to contract a gonorrhœa, but was the subject of a malformed urethra, which he greatly feared would render the cure of his clap unusually difficult.

On examination, I found the natural site of the urethral orifice occupied by a mere dimple; and about three-fourths of an inch further back, that is at the base of the frænum, a very small open-

ing, capable only of admitting a No. 2 bougie, which was giving exit to a copious flow of purulent discharge.

Before applying to me he had in vain attempted to arrest the discharge by injections, but experienced much difficulty in introducing the beak of even the smallest syringe. His complaint soon yielded to internal treatment; but, before dismissing him, I obtained from him the following particulars:—

In passing his water, with the penis held out horizontally, the stream descended at right angles, and fell almost perpendicularly to the ground. He had been married six years, during which time his wife had had three children, and was then pregnant with the fourth. He believed she was quite unconscious of his peculiar formation, but felt satisfied that his semen could not be emitted in the direction of the os uteri, but rather against the posterior wall of the vagina; and that, therefore, in her case, impregnation must have been effected in a different way to that in which it is usually supposed to take place.

Trusting this case may prove interesting to "M.D.," I am, Sir, &c.,

THOS. S. BURMAN, Surgeon.

Stratford-on-Avon, Sept. 2, 1850.

CASE OF POISONING BY OXALIC ACID,

WITH REMARKS ON THE ALTERATION OF THE VOICE AS A CONSEQUENCE THEREOF.

[To the Editor of the Medical Times.]

SIR,—I shall feel obliged by the insertion in your Journal of the following case, when your available space is not occupied with more valuable matter.

On June 21st, 1850, at eleven o'clock a.m., I was called to a square-built middle-aged man, of the name of Bishop, a shoemaker, and a hard drinker, who, they said, had poisoned himself. I found him evidently in violent pain, but sullen and obstinate; "determined to die," and refusing to take any medicine or answer any questions. An emetic, however, was at length got down him, which brought on copious vomiting of a dark moss colour. At this juncture, a tea-cup was found containing a few white crystals, which, on examination, I ascertained to be those of oxalic acid. I now freely administered a strong creamy solution of prepared chalk, giving a large wine-glassful of it every quarter of an hour, until the symptoms became less urgent. After the few first doses, as the pain continued very violent, he changed his mind as to dying, and eagerly took what was offered him; telling us that he had bought a quarter of an ounce of oxalic acid, and had swallowed the whole of it. His symptoms were these: severe burning sensation in the mouth and throat, with great thirst and difficulty of swallowing; excruciating pain in the epigastrium, and cold clammy perspiration; numbness and tingling in the extremities, and the legs drawn up towards the abdomen; the pulse but just perceptible, the breathing slightly spasmodic, and the features anxious and pallid.

Notwithstanding the severity of the symptoms at the time of my first visit (eleven a.m.) they had by eight p.m. all yielded to remedial measures, save the hot feeling in the throat, and the tingling of the extremities; but at this time a new symptom presented itself, namely, *alteration of the voice;* and it is to this one symptom that I wish particularly to draw attention.

On the following morning he was so far recovered as merely to require a little aperient mixture; and the next day he went to his work.

The man previous to taking the oxalic acid possessed a remarkably deep bass voice; now reduced to a very low key, giving you the idea of a person talking in an undertone.

This "weakness" of the voice remained for more than a month without any amelioration, during the greater part of which period his legs used, for several hours a day, "to go asleep," as he termed it. I saw him this morning (nine weeks from the time of his taking the acid) and his voice has now become much stronger; but he says he "cannot sing his old songs any longer, as his voice is so altered;" in fact, it is a complete old man's voice.

It is only in Mr. Taylor's "Jurisprudence" that I can find any allusion made to this alteration of the voice in poisoning by oxalic acid, and even there a doubt is expressed as to such symptom being a consequence of the poison. The case referred to is that of a female, who lost her voice for eight days, "but whether," remarks Mr. Taylor, "this depended on the action of the oxalic acid which she had taken, or not, it is difficult to say. Certain it is that this poison has a remote effect on the nervous system, indicated by the numbness and tingling in the extremities, which have been observed to remain long after the person has recovered from the first effects." Now, in this case of Bishop's, I think the altered voice is directly traceable to the taking of the acid, as it followed close upon it, was very marked, and gradually altered for the better as the tingling of the extremities decreased, showing that it was owing to the impression produced on the nervous system by the action of the poison. In most cases of poisoning the quantity taken can seldom be accurately ascertained; but, in this instance, from a reference to the druggist by whom it was sold "to clean boot-tops," as well as from the statement of the man himself, I have no reason to doubt but that the quantity actually swallowed was two drachms, and the most urgent symptoms entirely yielded to an emetic and a pint and a half of chalk mixture.—I am, &c.,

August 31, 1850. T. WALDRON BRADLEY.

THE GRADUATES' COMMITTEE.

[To the Editor of the Medical Times.]

SIR,—I am pleased to see that you are taking up the case of the graduates against the Committee. I was one of those who held up my hand against the monstrous proposition, that the Committee should be permanent "until a Charter should be obtained."

I objected to it on the grounds both of policy and right.

Of policy: because I saw that it would give all our opponents the opportunity of alleging that the Committee did not actually represent the graduates, but only those of a certain date; because it exhibited on the part of the Committee a want of confidence in their "constituents" (so-called) very likely to re-act upon themselves; because it was founded on the very absurd notion, *actually propounded by some of the Committee*, that no one else was so capable as themselves to carry the thing through; and because it violated the liberal and true principle of representation which the Committee profess to desire to carry out, and might, therefore, lead to the taunt, "If *you* have so little confidence in the graduates, how can you expect us to have more?"

Of right: because I conceived we had no right to take from the graduates who might follow us, equally competent with us to unite in the management of our affairs, the power of electing or being elected on the Committee, which concerned them equally with us; and because, having so limited the electoral body, I felt we did wrong in allowing the Committee to be called the Committee of Graduates, instead of what it is, if it exists; for I have heard nothing lately of it—the Committee of Graduates previous to 1847.—I remain, Sir, your obedient servant,

A SENIOR GRADUATE IN MEDICINE.

PLACENTA PRÆVIA.

[To the Editor of the Medical Times.]

SIR,—I send you a report of the following case of placenta prævia, which occurred in my practice about a fortnight since, should you deem it of sufficient importance, for publication. August 19.—I was requested to visit Mrs. P—, a delicate woman, aged 32, residing about four miles distant from my house. I found she was about eight months advanced in pregnancy with her third child; and that she was suddenly taken faint, and fell down in the house a few days previously to my being sent for. She received a slight contusion on the left breast, and hæmorrhage came on directly, not to a great extent at first, but continued to flow more or less. When I first saw her she presented an exsanguine, anxious countenance, a small fluttering pulse of about 110; complained of being faint and very weak; had no particular pain; the hæmorrhage still continued draining from her, but not in gushes. On an examination per vaginam, I found the os uteri flabby, and dilated to the size of half-a-crown, with the placenta implanted over the posterior two-thirds, the membranes occupying the anterior third, with a vertex presentation of the child. As the hæmorrhage was not severe at the time, I thought it right to try palliative means first, as there was no symptom of labour pains, neither had there been. I therefore strictly enjoined the recumbent position, cold acidulated drinks, with cold applications to the vulva, which means restrained the bleeding until August 21, when I was again sent for in great haste. On my arrival I found the patient almost bordering on collapse, gasping for breath, and flooding copiously, but still without the slightest labour pain. As there was a great deal of restless agitation, I at once gave her a good draught of brandy and water, which fortunately remained on the stomach, nothing previously having done so, and proceeded to turn and deliver immediately. I readily

passed my hand through the flabby os uteri, at the same time partially separating the presenting placenta, ruptured the membranes, (which in this instance were unusually tough,) seized the foot of the child, and brought down the nates, so as fully to occupy the pelvic cavity, thereby temporarily putting a stop to the bleeding. As labour pains were still absent, I administered secale cornut. 3ss. in a glass of strong hot brandy and water, and used friction to the abdomen. After waiting about fifteen minutes slight pains came on, when I delivered, the child being dead; and, as flooding continued slightly, I proceeded to remove the placenta, which was adherent to the posterior parietes of the uterus, but was easily detached, and came away without much difficulty. The flow of blood immediately ceased on the application of cold water to the abdomen, and a tight bandage around the waist; faintness, nevertheless, continued to such an alarming extent, that I was under the necessity of giving a teaspoonful of brandy in a little cold water every five or ten minutes, for two hours, when she began to revive, and has continued to do well ever since, and is now, I am happy to say, out of danger.

In sending you this case I am aware cases of placenta prævia are of frequent occurrence; but the singularity of this one *to me*, and its successful termination, was the absence of all uterine contraction, even during the process of turning and after it was accomplished, and which contraction did not take place until after the administration of the ergot in brandy, and abdominal friction assiduously applied.

It might be the opinion of some that I delivered too quickly after turning; but, considering the possibility of internal hæmorrhage, as uterine contraction was very weak, I thought it more prudent to deliver quickly, and contend against such hæmorrhage directly, should it exist; and, as slight bleeding continued after the birth of the child, I at once removed the placenta, so that the system might receive but one shock from the turning of the child and removal of the placenta, and especially as the prevention of further loss of blood was of the greatest moment.

It appears from the above case that hæmorrhage was in the first instance produced by the fall, thereby causing a partial separation of the placenta and all its concomitant dangers.—I am, &c.,

Hatherleigh, Sept. 3, 1850. JOHN GOULD.

THE MEDICAL AND SURGICAL PRACTITIONERS, SOCIETY.

[To the Editor of the Medical Times.]

SIR,—There was an advertisement in your journal a fortnight since, from a society with the above heading, and as, like many others, I feel interested in the success of a society which professes to put down unqualified practice and to recover debts, I should be glad to know your opinion of the probable success of this new scheme. There has been, within the last four or five years, such a rapid succession of new societies, with all sorts of objects, —political, ethical, benevolent, scientific, and economical,—that more than usual caution is required before joining any new body. The objects proposed by this new society are certainly of paramount importance to men who, like myself, practising as general practitioners, are required to attend to every call, in every class of life, and who are often scandalously deprived of a just requital for their services by the heartless ingratitude and dishonesty of the recipients of their generously-accorded aid. An organisation, carefully and wisely conducted by respectable men, whose characters would be an authority for the integrity of their proceedings, would constitute a great boon to the hard-worked and ill-paid order of general practitioners. I have now on my books more than 800*l.* in bad or doubtful debts, and, judging by my own practice, I should conceive that there must be an amount of money owing to medical men throughout the country, and within the statute of limitations, of not less, and probably much more, than 1,000,000*l.*: a sum so large as to be almost incredible.

Any society that will make a resolute effort to obtain this sum for us will deserve our gratitude.—I am, &c.,

LECTOR.

[The society referred to will, we understand, be managed by an elective council, who will be responsible to the members, and it will consequently afford the best security that a merely associative body can give. Guarantees will be required from all the officers who will be appointed by the Council. Our correspondent had better apply for further information at the offices.—ED. *Medical Times.*]

HALIFAX SELF-SUPPORTING DISPENSARY.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* of last Saturday reference is made, by "Argus," to a penny-a-week dispensary, established by the opulent firm of "J. Akroyd and Son," for the ostensible object of "encouraging a system of providence and self-reliance" amongst their employed.

I would beg to ask the "medical staff" who have lent themselves to this penny-a-week scheme, if they have found it either to exalt their *status* in the eye of the profession, or to enrich their coffers.

Out of some fourteen hundred hands employed at Copley-mill, about fifty only can be induced to subscribe their penny a week. The distance from Halifax to Copley, where the *physician* "sits" twice a week, is at least two miles: this will give him a weekly walk of some eight miles, and cause immense loss of time—for what? For about four shillings and twopence per week! But, suppose that the Messrs. Akroyd kindly make up this pittance to 1*l.* per week, that is, 52*l.* a year, instead of 10*l.* 16s. 8d., obtained by the labourer's pence, can it even then be considered consistent either with the dignity of the physician or of the general practitioner, to accept such a donum for such laborious work? Why, the very operatives themselves receive higher *wages* for manual labour.

But, apart from such considerations, which affect only the attending "medical staff," such penny-a-week institutions or clubs perpetrate a positive injustice to the general practitioner; for, these subscribing members of a penny per week are, relatively, gaining more weekly than many of the medical men who attend them, and are certainly more able to pay the regular fee to a regular practitioner than many an honest tradesman, or shopkeeper, or farmer, who must, from the usages of society, keep up an appearance in the world, if it be only for credit' sake.

These few hurried remarks, if they be allowed a place in your journal, are intended to warn any who, from peculiar circumstances, might feel inclined to fill the vacant places which have been made in the Copley "medical staff," since the date of "Argus'" letter.

The following placards will explain all that needs to be known of the rupture alluded to:—

"PUBLIC NOTICE. Having discharged my late Dispenser, Mr. Christopher Kirby, I hereby caution all persons from paying to him any monies on my account. Charles W. Pearce, Surgeon, September 2nd, 1850. 32, Northgate, Halifax."

"CAUTION. Differences having arisen between Messrs. Pearce and Kirby, of No. 32, Northgate, Halifax, all persons owing any accounts to their firm, are cautioned against paying the same, or any part thereof, to either of the said partners without the consent of the other of them. Craven and Ranken, solicitors for Mr. Kirby. Halifax, Sept. 3rd, 1850."

Since the exhibition of these placards on our walls, overtures, it is reported, have been made, by the remaining portion of the "medical staff," viz., the physician, to several regular practitioners to join him in the *reforming* of the "staff." As yet, however, none seem willing to enter into such an alliance, and it is to be hoped that all *regular* men will ever repudiate such schemes.

I am, Sir, &c., &c.

Sept. 11, 1850. ——.

IRISH LUNATIC ASYLUMS.

"Is there any attempt now making to influence the Irish Government to rescind their resolution of placing medical men as *resident* medical superintendents of the Irish District Lunatic Asylums?"

[To the Editor of the Medical Times.]

SIR,—As your honest and fearless journal had been the means of exposing and, it is still fondly hoped, of remedying the odious and cruel plan of conducting large lunatic hospitals in Ireland without any *resident* medical authority, will you set the public mind right as to a report, strongly gaining ground, that attempts (and by medical cliques, too) are now making to exclude from the superintendence of Maryboro' Lunatic Asylum a medical resident officer, *wherein* are 200 patients, and *whereon* is in attendance *one* medical visiting officer—a man, certainly, of high professional repute and extensive practice? The late manager was a civilian. He has been dead more than a month, and it is stated that, as matters have gone on so well *without* a medical officer, things may as well be let proceed as before! The *Medical Times* having compelled, by the exposure of such non-medical proceedings, a great reform to be commenced, cannot now look back, and is bound to ask the question,—Are the great public lunatic charities of Ireland

to be conducted as medical institutions or as prisons? or is the privilege of individuals to stand in the way of the progress of humanity to the patients and of justice to the profession?—I am, &c.,

AMICUS JUSTITIÆ.

SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—The letter of "Argus" on "Halifax Medical Ethics," which appeared in your last publication, suggests many points of comment; but the subject must be familiar to the readers of the *Medical Times*.

Unlicensed pretension, quackery, and imposture, have been long predominant in the profession, not only at Halifax, but in many other places, and are found more or less active throughout the length and breadth of the land. The only remedy for the evil is in the unity of the profession. That "unity" is the great object sought by the promoters of the organised general practitioners enrolment, and will be best facilitated by directing the most persevering attention to the question between the College of Surgeons and the profession at large, which it is hoped will yet be amicably arranged; and thus be the means of putting an end to that disorder and confusion which have been the great causes of the many irregularities complained of by "Argus," and of the presumptuous pretensions of quackery and imposition.

But, with respect to the so-called "Halifax Self-supporting, or Penny-a-week Dispensary," which he charges with having a tendency to favour quackery, it must be admitted that great errors have long prevailed in the formation, and in the working of the pretended "self-supporting institutions." The many complaints of irregularities and imperfection in the management of such dispensaries led to the formation of the "London Society for promoting the establishment and facilitating the objects of Self-supporting Dispensaries throughout the United Kingdom and Ireland," whose head-quarters are here.

The general objects of this society are defined by its title; but it directs its particular attention to the removal or exposure of abuses in the administration of medical relief to the humbler of the labouring classes. It undertakes to furnish every required information and advice, and to promote the due and efficient organization of such institutions, so as to prevent such classes of the people from being imposed upon by quacks and impostors, to sustain amongst them a sense of independence, and also to take care that a proper regard is paid to the interests of the profession, as well as to the interests of the labouring poor.

The existing Halifax institution is a mere medical club. The self-supporting dispensaries, as planned by Mr. Smith, of Southam, are, on the contrary, open to all the members of the profession within the district, and have managing committees formed of the leading inhabitants of the neighbourhood, while their benefits are restricted to the humbler classes of the labouring poor, to whose condition in life the subscription of one penny or twopence per week must be considered as applicable. As a reserve against any imposition on the profession, persons earning weekly wages beyond a certain defined limit, are excluded from being members of such societies. Under such regulations, imposition on the profession is avoided, while independent medical aid is afforded to a class hitherto mere objects of *charity* or of *pauper* relief in sickness.—I am, Sir, &c.,

T. D. HAWKER.

33, Edwards-street, Portman-square, Sept. 9, 1850.

MEDICAL NEWS.

DEVON AND EXETER HOSPITAL.—A letter was recently sent to Mr. Commissioner Bere, which, on being opened, was found to be without other signature than "Benevolus." It contained a Bank of England note for 20*l.* for the use of the Devon and Exeter Hospital. Upwards of 97*l.*, including the contribution of "Benevolus," was collected at the 109th anniversary of the institution. It appears there is an annual deficiency of funds amounting to 300*l.* Mr. Durant, the president, in alluding to this, offered to be one of thirty to pay 10*l.* 10s. a-year to meet the deficiency. His offer was not responded to.

THE MIDDLESEX MAGISTRATES have a resolution under consideration to the following effect:—"That this court is of opinion, that measures should be taken for the substitution of a fixed salary in lieu of fees to the coroner, and for the appointing of a medical officer to the coroner's court, at a fixed salary, for the purposes of *post-mortem* examinations."

MR. KNILL, of Bishopsteignton, has left a legacy of 100*l.* to the Devon and Exeter Hospital.

THE foundation-stone of the new infirmary at Torquay was laid on Tuesday last.

OBITUARY.—At Falmouth, on Friday, 30th Aug., John Marshall, Esq., for many years a surgeon in the H.E.I.C.S., late Member of the Medical Board, Calcutta, and Physician-General of the Bengal Presidency, aged 67 years.

DEATH OF PROFESSOR HECKER.—On the 11th of May, Dr. Hecker, the lecturer on general pathology, died of morbus Brightii. Dissection proved atrophy of both kidneys; the cortical substance having perfectly vanished. Hecker was a very learned man, and especially acquainted with the history of medicine. It will be difficult to fill up his place.

DR. ROSER, formerly lecturer at the University of Tubingen, has been appointed Professor of Surgery at Marburg.

DR. WUNDERLICH, Professor of the Medical Clinic at Tubingen, has succeeded Professor Oppolzer at Leipzig.

PROFESSOR GRIESINGER, formerly in Kiel, lately appointed the Director of the Medical Clinic in Cairo and Surgeon to the Viceroy, has been received with great distinction.

MR. SKEY, F.R.S.—This gentleman's work on "Operative Surgery" is rapidly progressing through the press, and will appear in October.

CHOLERA IN AUSTRIA.—The Austrian papers state that cholera has been very bad in parts of that country. In constructing a railroad across the Semmering mountain an immense number of people were employed, but the Government had to discontinue the works. The *Times* states, pulv. ipecac. co. proved an excellent remedy.

CHOLERA AT MALTA.—The last accounts from Malta of the progress of cholera, represent the epidemic as somewhat abating, but still many cases were fatal. Much inconvenience was felt, and loud complaints made of quarantine regulations recently imposed.

HEALTH OF LONDON DURING THE WEEK.

EIGHT hundred and ninety-nine deaths and 1474 births were registered in the week ending September 7. The mortality is, therefore, near the average; and the births registered exceed the deaths by 575. In the first week of September last year, 3183 persons died in London; 272 by diarrhœa, and 2026 by cholera. It was the week in which the mortality was highest. In the corresponding week of the present year, the deaths by diarrhœa have been 75, by cholera 8. The deaths from diarrhœa are now rapidly declining; cholera was fatal in 8 instead of 4 cases, the number registered in the previous week. Two of the deaths from cholera were in the parish of Marylebone. By the Greenwich observations, the mean reading of the barometer was 30·196 inches; the mean temperature of the air in the shade was 56·5° through the week, or 2·4° less than the average of the last seven years; the mean temperature of the Thames was 59°. Nearly an inch of rain fell on Sunday and Tuesday. The wind blew chiefly from the west and north, and passed over Greenwich at an average rate of 59 miles a day.

MORTALITY TABLE.

The Deaths in the several Districts are as follow:—

DISTRICTS.	Population in 1841.	Sept. 7, 1850.	Sum of Ten Weeks.
London...	1948369	899	11281
West	301189	141	1516
North	376568	161	1838
Central...	374199	139	1902
East	393067	190	2537
South	503346	268	3488

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	20	Heart	22	Phthisis.....	119
Bronchitis	32	Hooping-cough ...	25	Pneumonia	31
Cholera	8	Hydrocephalus ...	32	Scarlatina	35
Childbirth	4	Influenza	1	Small-pox	8
Convulsions	30	Liver	9	Stomach	4
Diarrhœa	75	Lungs	2	Teething	10
Dropsy	16	Measles	13	Typhus	48
Erysipelas	7	Paralysis	24	Uterus	1

Deaths in the week ending Saturday, Sept. 7, 1850.
(Metropolis.)

Causes of Death.	Sept. 7. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	422	289	181	899	11281
Specified Causes	422	287	181	890	11241
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	185	38	28	251	4670
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	3	27	16	46	449
Tubercular Diseases	67	106	7	180	1832
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	37	27	30	94	1092
Diseases of the Heart and Blood-vessels	5	16	5	26	212
Diseases of the Lungs, and of the other Organs of Respiration	40	13	27	80	726
Diseases of the Stomach, Liver, and other Organs of Digestion	20	20	20	60	787
Diseases of the Kidneys, &c.	...	3	9	12	76
Childbirth, Diseases of the Uterus, &c.	...	5	1	6	106
Rheumatism, Diseases of the Bones, Joints, &c.	2	5	1	8	72
Diseases of the Skin, Cellular Tissue, &c.	...	...	1	1	14
Malformations	4	...	...	4	33
Premature Birth and Debility ...	23	1	...	24	202
Atrophy	25	1	...	26	200
Age	...	...	29	29	456
Sudden	2	4	3	9	78
Violence, Privation, Cold, and Intemperance	9	21	4	34	236
Causes not Specified	...	2	...	9	40

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	724	466	258
Females	750	433	317
Total.....	1474	899	575

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
							Miles.		
Sunday	30·230	57·0	55·3	— 2·7	W.	N.N.W.	50	0·04	Nothing was shown at any examination.
Monday	30·235	61·5	56·4	+ 2·2	W.	W.	70	0·00	Nothing was shown throughout the day.
Tuesday.....	30·095	57·5	50·7	— 1·3	N.W. & W.	N.W.	75	0·01	Nothing was shown throughout the day.
Wednesday.	30·193	56·0	45·7	— 2·5	N.E.	N.	55	0·00	Positive, and tension strong during the afternoon and evening.
Thursday ...	30·180	55 0	43·0	— 3·5	N.	N.	40	0·00	Positive, and tension moderate during the afternoon.
Friday	30·178	53·6	42·2	— 4·9	E. & N.	N.	75	0·00	Positive, and tension strong during the afternoon.
Saturday ...	30·260	54·6	39·2	— 4·1	N.N.E.	N.E.	45	0·00	Positive, and tension moderate during the afternoon and evening.
Means ...	30·196	56·5	47·3	— 2·4	W. & N.		sum 410	sum 0·08	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications have been received from Medicus; Amicus Justitiæ, on the "Irish Lunatic Asylums;" Alpha; Marie; Mr. Waldron Bradley, of Kidderminster, "Case of Hypospadias;" Dr. Prior, of Bedford; A Subscriber; Mr. Milton, of Jewin-street; Dr. Dillon, of Bath; Mr. Smith, of Caroline-street, "A Remarkable Case of Hare-lip, operated upon by Mr. Fergusson, with Drawings by Dr. Westmacott;" Lector, on the "Medical and Surgical Practitioners' Society;" Mr. Henderson, of the Haymarket, "Notes on the Preparation of Crania in Hot Climates, and chiefly applicable to India;" Mr. Hawker, of Edward-street, Portman-square, "On Self-supporting Dispensaries;" A Friend in Edinburgh, "A Song sung with much Applause at a late Fête;" An Old Subscriber at Manchester; Dr. Jenner, of Albany-street, "On Typhus Fever;" L.; Mr. Atkyns, of Dorset-crescent, New North-road; Mr. Cowen, of Bewdley, "A Singular Case of Premature Maturation of the Vaccine Vesicle;" Mr. Oldfield.

Marie.—With every desire to oblige our fair friend, we are unable to advise her in this place.

Dr. Prior's proposed papers will be acceptable in the form of original communications.

A Subscriber.—It will be more satisfactory to our correspondent to apply to Mr. Belfour, of the College of Surgeons. We are sure that gentleman will readily give the information required.

We are happy to state that so much of Dr. Jenner's papers on Fever is in the hands of the printer that we think it safe to promise their weekly appearance till complete.

A Reader's remarks upon Mr. Beale's communications are unavoidably postponed till next week.

L.—We do not know if a second edition is contemplated. The work is very excellent.

Mr. Atkyn's complaint shall be inquired into.

An Old Subscriber at Manchester should consult the works of Sir Benjamin Brodie and Mr. Stanley. They are of the most practical character, and will neither mislead nor victimize him, as might happen did he apply to specialists. 2. Has our correspondent tried the carbonate of ammonia?

X. Y. Z.—Supposing a healthy adult to be enclosed in an unventilated chamber, containing 1000 cubic feet of atmospheric air, that air would, at the expiration of twenty-four hours, contain about 10 cubic feet of carbonic acid gas. The atmosphere thus formed could not be breathed without exciting some unpleasant symptoms, as headache, sense of weariness, &c. Of course, the number of cubic feet necessary to be allotted to a number of individuals congregated in one room must vary with the method of ventilation, that is, the rapidity with which the atmosphere is renewed from without. In the wards of the London Hospitals from 1000 to 1200 cubic feet are considered sufficient space for each patient, those wards being ventilated only by means of the opening of doors and windows.

Medicus must apply to Dr. Todd for the information he requires.

Mr. Oldfield.—Should the Bill pass, as now proposed by the National Institute, a Licentiate of the Faculty of Physicians and Surgeons of Glasgow will be received as a member without examination, and becomc entitled to practise in England.

Dr. Mauthner's Hospital for Children in Vienna.—The annual report of the St. Ann's Hospital for Children, in Vienna, has just appeared. The number of sick children attended in the hospital, during the last year, amounts to 765, that of the polyclinica to 3936; of whom, in the former 596, in the latter 3664, were discharged cured or improved. The deaths amounted to 159 in the hospital, and to 226 in the polyclinica—indeed a small number. The hospital is directed by Dr. Mauthner, who founded it in 1837, and made great sacrifices for this purpose; but he succeeded very well; for, from the beginning of the establishment till now, 47,414 sick children have been attended, partly in the hospital, partly out of it. Dr. Mauthner at last succeeded in establishing a clinic in his hospital, which began on the 20th of April, and is frequented already by more than fifty hearers. The clinic is held every day, from two to four o'clock in the afternoon; and Dr. Mauthner lectures every Saturday.

Poisoning by Mistake.—An inquest has been lately held at Uplyme, Devonshire, on the body of a female child, five weeks old. It appeared from the evidence, that, the infant being restless, the mother boiled two poppy-heads and some marygolds in water, and gave it one tablespoonful of the liquid to drink. The child died in consequence. The verdict was to the effect, that the deceased died from narcotic poison, administered by the mother, but of the fatal quality of which she was ignorant. From the inquiries made by the coroner, it appeared, that this decoction of poppy-heads is in much repute among the inhabitants of Uplyme. He strongly reprehended the use of such a poisonous liquid, and intimated, that if any more deaths occurred from its use, ignorance of its destructive qualities would not avail the parties administering it, with so fatal an example before their eyes.

ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, Esq.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XIII.

TRICHIASIS.

Trichiasis, its Degrees.—Distichiasis, Explanation of its Appearance, and its true Nature shown.—Cause of Trichiasis.—Effects of Trichiasis.—Narration of Case.—Treatment of Trichiasis.—Manner of Operating with Case.—Ectropium, its Effect on the Eye.—Division of Ectropium into two Classes of Cases.—First Class, those arising from Mechanical Causes.—The Contraction of Cicatrix after Abscess, at the Edge of Orbit, most common Cause.—Question of the Bones of Orbit being Carious.—Principles on which the Treatment is to be effected.—Case, illustrating the Manner of Operating, with Comments.

Gentlemen,—The term "trichiasis" is used to express that morbid direction of the eyelashes, whereby their natural position is changed, and they are turned towards the globe of the eye. There are degrees of trichiasis varying from a slight deflection from the natural line of one or a few of the cilia, to the most complete maldirection of all of them. There is a form of trichiasis, by no means uncommon, which has induced some surgeons to suppose, and to propagate it as a fact, that there is an actual production of an inner row of cilia. That, in this distichiasis, as it is called, new cilia proceed from a more internal part of the lid towards the globe. I have not been able to meet with a single case that has confirmed that opinion. I believe that it is a mere deceptive appearance, arising out of the irregular manner in which the cilia are placed at the edges of the lid, and the isolated position that the most internal of them will have when they are turned away or separated from those of their fellows that are set more externally on the lid; for, if the inverted hairs be brought to a level with the others; that is, be made to join them, all the appearance of a double row is lost; and the bases of all seem disposed just as in the healthiest lids, and the aggregate of them is never more than constitutes an ordinary eye-lash. Moreover, distichiasis may be imitated by separating the most internal cilia, and bending them inwards.

I may remark, that in certain states of the lid, where the tarsal margin has suffered from inflammation that has implicated the hair follicle, or where these follicles are diseased or impaired originally, from the cilia having been repeatedly plucked out, abortive hairs are often produced, which are usually colourless and very fine, and grow inwards, but they issue from the old site of the cilia. There may be, also, a displacement of the cilia arising from the separation of their roots by inflammatory products; but with that there ensues a thickening of the lid, and all the cilia are affected; some will be separated to a considerable distance, and appear to be a new production. You are doubtless aware that the edges of some lids are thinner than others, and the cilia are more abundant also in some than in others; so that thus there are cases in which the appearance of a false row of lashes may be the more readily produced.

I have not time to consider in detail those causes which seem to favour or produce trichiasis; in many instances it can clearly be traced to inflammatory origin, by which I mean inflammatory affections of the lids; but frequently they do not even admit of being guessed at. The inversion of a single cilia may effectually destroy the function of vision, by making the cornea opaque, and therefore demands as much attention as when a greater number irritates the eye.

The following is not the only case of the kind that I have met with:—A man, aged 31, was sent to the hospital by Mr. Redwar, one of the committee, to be treated for inflammation of the right eye. My attention was, however, first drawn to the condition of the left cornea, which was densely opaque in its upper half, and hazy in the remainder, and the cause of which I quickly discerned. There were two inverted cilia, about an eighth of an inch apart, that rested on the cornea. There was scarcely any power of vision remaining in the eye; to use his words, "the sight had been failing for several years; all the treatment directed to it was ineffectual, and it was becoming more and more dim."

"He hoped I would do nothing to it, for he had already been sufficiently tortured with strong washes, and blisters, and cupping." He regarded it as a lost eye, and quite discredited that it could be benefited. He was not aware that the cilia were resting on the cornea. I find the following remark entered in my note-book:—"This case well exemplifies how the true cause of opacity of the cornea may be overlooked; it also shows what slight mechanical causes will produce considerable opacity of that part."

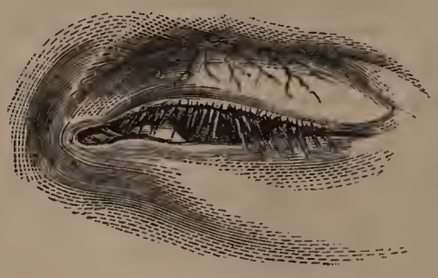
Few patients would submit to any other treatment, in the first instance, for the riddance of one or more offending cilia, than the simple and easy process of using the tweezers; and probably there are few surgeons who, in the onset, would adopt any other measure, and correctly too, because it is possible that after such treatment, there may be no more inversion. But there is no certainty that the mere plucking out will succeed, and I do not think that it should be repeated for any length of time, when many cilia are so affected; for I believe the continual removal of them by force is hurtful to their follicles, and renders their maldirection more perverse, and produces also abortive cilia, (which are more troublesome than any to deal with,) and tends likewise to inflame or injure the contiguous follicles, and increase the trichiasis. Various other palliative measures have been adopted for trichiasis; but I shall not enumerate all of them; indeed, I shall only mention one more. I quote it from Dr. Mackenzie's work, which says that "the old practice of turning the distorted hairs into their proper direction, and cementing them to the other cilia, is not altogether to be despised." The cement is to be made of alcohol and shell-lac. The effectual or radical treatment is, to remove the cilia permanently from touching the globe. When a few of them are inverted, I consider the extirpation of their bulbs the proper practice. There must necessarily be, in most cases, a sacrifice of a few of the healthy ones; but that matters nothing.

I operate in this manner. I make an incision on each side of those destined to be removed, cutting through skin and muscle, from the edge of the cartilage of the lid to just above the extent to which the cilia bulbs reach, and a third incision transversely across the lid, and uniting with the extremities of the vertical ones; then I lay hold of the bit to be severed with tenaculum forceps, and dissect it off, keeping the edge of the knife close to the cartilage. The edges of the wound are united by a suture. I place the fore-finger under the lid while the incisions are being made. It is recommended, by writers on ophthalmic surgery, to place a horn spatula under it, but it makes a clumsy affair.

When many of the cilia turn in, in several parts of the lid, permanent relief may be afforded by taking out a narrow strip of the skin of the lid, along the entire margin of the cartilage, and thus producing slight eversion of the tarsus. This I consider preferable to excision. I have effected it many times. But that might not be enough, and then the whole of the cilia must be taken away, a minute description of the manner of doing which is not necessary. You proceed just as if a bunch were to be dissected out, and perhaps it is more convenient to dissect from one angle of the lid to the other, than from above downwards; the great object of your care being effectually to remove the bulbs of the cilia, and not to damage the tarsal cartilage, on account of the injury that must accrue to the Meibomian glands were it wounded, or any portion of it cut off. Slight eversion of the tarsal cartilage will nearly always suffice to remove inverted hairs of the lower lid from touching the globe, because they are shorter than those of the upper lid, and naturally further away from the globe. Lately a young woman applied at the hospital with trichiasis of the lids of each eye; its arrangement was symmetrical; the outer halves of the cilia of all the lids were turned in. Although those of the lower lids grew directly inwards, a very few only touched the globe, and slight eversion of the tarsal border rectified the evil. In the upper lids, the trichiasis was less marked, yet several of the cilia rested on the cornea. Here eversion of the cartilages was not sufficient to remove them from the contact of the globe, and I extirpated them. The effects of trichiasis are the same as those of entropium,—vascularity of the eye; intolerance of light; opacity of the

cornea, with or without ulceration; thickening of the conjunctiva; and, sooner or later, loss of sight.

This drawing does not show the manner in which the cilia turn in, that is always concealed unless the lid be raised, but it portrays the characters of the affection. The eye is almost closed, the brow is contracted, and the upper lid is puffy and vascular. It was taken from a patient in whose upper lid the most internal of the cilia rested on the cornea.



ECTROPIUM.

Ectropium, or turning out of the eye-lid, is a condition the very opposite to that of entropium, which has lately been before us. It is, comparatively speaking, a rare affection, and, setting aside aggravated cases, is not usually attended with detriment to the eye as an organ of vision. The deformity produced, as well as the inconvenience—frequently misery—occasioned by the flowing of any amount of lachrymal secretion, however small, over the cheek, instead of passing through the natural channel to the nose, are its ordinary evils. But yet there is always a certain degree of danger, for, as the eye ball has lost itsparticular covering, to a greater or less extent, it is, by that amount, constantly exposed to injurious influences, and the frequent accessions of acute attacks of inflammation, or the existence of chronic inflammation, which may arise out of such circumstances, may seriously impair the vision of that eye or destroy it altogether.

I divide ectropium into two classes, those arising from mechanical causes, in which the textures of the lids have not been the seat of the disease, but the lid has been merely everted from the contraction of cicatrices, the result of wounds, contusions, burns, ulcers, or abscesses, which have been on the lid or in its vicinity, and those the consequence of disease of the lid, in which some part of its structure has been primarily affected.

Of the first class, the most usual cause is, the formation of an abscess or abscesses at some part of the circumference of the orbit. Such abscesses are usually attributed to caries of the bones, but doubtless that cannot always be the case. The pus that separates the periosteum from the bone may as frequently arise from periostitis as ostitis, and ulceration or caries of the bone may be the consequence, and not the cause, of the suppuration. Nor is it correct to suppose, that, when the probe detects bare bone in such abscesses, the bone is necessarily carious; it may be merely denuded of its covering, but be otherwise healthy. I will relate a case in point as I proceed. In the very large majority of cases it is the lower lid that is affected; the abscess has been at the outer and lower edge of the orbit, and the cicatrix a little below the outer angle of the lids; the outer half of the lid is everted, or at most two-thirds of it, the amount depending on the position of the cicatrix, whether it be nearer or further from the median line, as well as the extent and duration of the abscess; but I believe that there is never that excessive degree of deformity from the cicatrices of abscesses that may and does result from the contractions of burns or syphilitic affections of the bones of the face.

The success of an operation for ectropium, from such a cause, mainly depends on the free liberation of the lid, and a supply of skin and subjacent tissue for that which has been lost or injured; so that, when the lid is replaced, there shall be a continuity of healthy structure; but merely to release the lid by dissecting away the cicatrix, and to leave the gap made, to be filled up by granulations, would be useless. There are two ways of making skin available,—by transposing it, or by transplanting it.

The following case, with a few comments, will illustrate how the first is to be done: it will also show what other measures are required in an ordinary case of ectropium of the lower lid, such as is usually met with:—A child, about four years old, was brought to the hospital with ectropium of the outer half of the right lower lid, caused by the contraction of a cicatrix which was firmly adherent to the edge of the malar bone. The cicatrix was small, and situated at a greater distance than ordinarily from the lid. From the circumstances of the case, I judged that liberation of the skin from the bone, and the process of transposition, would be sufficient to allow the lid to be brought to its natural place. I dissected out the cicatrix by horizontal elliptical incisions, and separated the surrounding skin from its cellular attachments to at least three quarters of an inch, by which it could be slid to a new position, and made available as new skin, without its want being felt at the parts from which it was drawn, and then united the wound by sutures. I found the skin of the lid adherent to the parts beneath, to an extent and with a degree of firmness that was not ascertainable beforehand, and the lid could not be quite liberated till the dissection had nearly reached its margin. This transposing the skin is after the manner of operating for hare-lip, when the fissure is extensive, and the edges of skin much retracted. Unless the skin is detached for a considerable distance from the maxillary bones, and brought forwards, and made to unite just at the right place, the cure will be defective. After thus operating on the lid, I snipped off a piece of conjunctiva from the outer part of the sinus of the lid. The results were so far satisfactory; but some deformity still remained, which was due to the twist that the cartilage of the lid had acquired, and for which special treatment was needed. A few weeks after, I removed a wedge-shaped piece of the cartilage, the base of which was above, from the most bent part, and brought the edges thus made together by suture: this was quite a finishing-stroke. Beyond the scars that remain, there is scarcely any difference between the lids of opposite sides. There is advantage gained by the contraction consequent on the removal of a portion of conjunctiva, but it is only applicable when the lid is free; and the same must be said of taking out a portion of the cartilage. With a little study of cases, it is easy to perceive when transposition of skin may be adopted, or when transplantation must be resorted to.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

Licentiate of the Royal College of Physicians, Professor of Pathological Anatomy in University College, London, and Assistant-Physician to University College Hospital.

[Continued from page 249.]

TENTH PAPER.

Perforation of the Intestine is by far the most fatal of the complications of typhoid fever. Rokitansky affirms that the adhesions which now and then form after perforation has occurred, are never permanent; that a cure, consequently, is never effected. Louis refers only to fatal cases; Chomel the same. My own experience affords no example of recovery after this lesion. Perforation of the ileum takes place during the progress of only one acute disease, and that is typhoid fever; of only one chronic disease, and that is phthisis. One of Peyer's patches, in the lower part of the ileum, is the ordinary seat of the perforation. Chomel details one case in which it took place in the colon. In a majority of cases perforation occurs after the termination of the second week of the disease, very often after the fever properly so-called; *i. e.*, the specific blood disease—if the blood is the part primarily affected—has terminated, when the ulcers in the intestine have passed into a chronic form, constituting the atonic ulcers of Rokitansky. Louis details eight cases of perforation; in one case, the lesion occurred on the 12th day of illness; in two on the 18th day; and in the five others between the 22nd and 42nd days inclusive.

Case 32.—In a man aged 37, diarrhœa—headache—chilliness—abdominal pains—early sense of severe illness, followed by slight deafness—fulness, resonance and tender-

ness of abdomen—abnormal extent of splenic dulness—rapid pulse—rose spots—restlessness—copious vomiting of green fluid—sudden death.

Twenty-two hours after death.—Lymph and turbid serosity, mixed with a little fæculent matter in the peritoneal cavity—perforation of ileum 8 in. above ileo-cœcal valve—extensive ulceration of Peyer's patches—speudo-suppuration of one mesenteric gland—enlargement of spleen.

John P., aged 37, a moderately stout, fair-complexioned man, with light brown hair and eyes, a labourer, was admitted into the London Fever Hospital, April 15th, 1849. He was of temperate habits—had not suffered from want of food or clothing—had resided in London nine years. His previous health had been excellent. On first rising from bed at 6½ a.m., Tuesday, April 10th, he passed a watery stool; the day before, his bowels were regular, and he felt quite well. About two hours after the diarrhœa commenced, he began to suffer from severe frontal headache; at the same time he felt chilly. He left the fireside as little as possible, because he felt, when away from the fire, "so shivering." He left his work the day his illness began, but did not take to his bed till Thursday, April 12th. On the 11th he was, for the first time, troubled with aching, griping pains in the abdomen; these continued till his admission. The headache ceased on the 12th or 13th. He had had no vertigo, noise in the ears, nor epistaxis.

On his admission, Sunday, April 15th, he walked unassisted from the door of the ward to his bed,—a distance of about 60 ft. He was seen by me for the first time, April 16th, *i.e.*, the 8th day of disease. At that time there was no headache; his mind was clear; his memory good. With the exception of slight deafness, the special senses were unaffected; the complexion was clear; there was no vertigo—no flushing of the face—no pallor; in fact, the aspect of the man's face, and the expression of his countenance, were natural. He lay unconstrainedly on his back, with his legs extended, was able to leave his bed unassisted, but said he felt too weak to stand alone; at the same time he sat up in bed, for me to examine the back of his chest, readily and with facility. The tongue was of a pale yellowish brown colour, dry, glazed, with a deep fissure down the centre. He had passed, the preceding twenty-four hours, two watery stools. He suffered from occasional pains in the belly, not limited to any particular part. The abdomen was full and resonant, and decidedly tender in the hypogastric and iliac regions. The splenic dulness was abnormally extensive.

The pulse, 140 in the minute, was small and weak; there was trifling cough.

The skin was hot and dry. About thirty rose-spots were present on the chest and abdomen. There were no miliary vesicles.

An enema, composed of twenty drops of laudanum and four ounces of starch-water, was ordered to be administered night and morning.

Late in the evening he complained to the nurse of nausea; passed a restless night; had but little sleep. On the morning of the 17th, *i.e.*, the 9th day of disease, he left his bed unassisted, but with some slight difficulty. About seven a.m. he vomited some green fluid. The vomiting was repeated several times in the course of the morning; altogether he ejected more than two pints of transparent dark-green fluid. About nine a.m., the nurse, observing his feet were very cold, had a bottle of hot water placed in the bed. He did not complain at any time during the day of pain in the abdomen. Just before three p.m., the nurse, seeing his feet projecting from the bottom of the bed, requested he would draw them up; he did so, and spoke to her. He was then quite sensible, and did not complain of any pain. In a minute or two, the nurse, not having left the ward, heard him let fall a small vessel he had in his hand to receive the vomited matters. He struggled violently, threw up his arms, vomited an immense quantity of turbid dirty green fluid, soaking the bed-clothes, and even running in considerable quantities on to the floor. He died in two minutes from the moment the vessel fell from his hands.

I saw him three-quarters of an hour after death. At that time there was no trace of the rose spots so well marked on the day before. This man's stools were analysed by my colleague Dr. Parkes, whose researches on this subject were detailed in a Clinical Lecture published in the *Medical Times*.

The body of John P. was examined twenty-two hours after death, and the following notes made:—

Height, 5ft. 10in.; cadaveric rigidity well marked; no sign of decomposition; very little fat on the abdominal parietes.

Head.—Cerebrum and cerebellum, and their membranes, perfectly normal.

Larynx.—Mucous membrane of larynx generally, especially the under surface of the epiglottis, somewhat redder than ordinary.

Bronchial tubes contain very little mucus; lining membrane deep purple, but of normal consistence.

No enlargement of *bronchial glands*.

Lungs.—Crepitant throughout; the most depending part of either lung contains a slight excess of dark fluid blood.

Pericardium healthy in all particulars; contains about ½oz. of transparent yellow serosity.

Heart.—Right-side moderately distended by a soft, dark, and tolerably firm pale fibrinous clot continuous with a similar clot in the pulmonary artery, moulded to the sigmoid valves; a similar but smaller clot in the left side of the heart continuous with a clot in the aorta moulded to the sigmoid valves. Blood fluid in the veins of the extremities; subtance and valves healthy. Weight 10oz.

Tongue dry; yellow. *Pharynx* pale purplish red.

Œsophagus yellow; no trace of ulceration.

Abdominal cavity.—The parietal layer of peritoneum is thickened, opaque, dull white, finely streaked with delicate pink capillaries. It adheres, by means of recent lymph, to the large omentum; the lymph is dull yellow, readily breaks down on pressure, and contains much serosity in its substance. On raising the great omentum the folds of the intestine are found in a great measure covered by yellow lymph, most abundant in the angles formed by adjacent folds of intestines. The small and large intestines are distended with flatus. Several folds of small intestine are situated in the pelvic cavity, adhering loosely to each other, and to the upper surface of the bladder. One fold of the intestine is adherent by its side to the mesentery; on breaking down this adhesion three openings are exposed, leading into a cavity situated between the folds of the mesentery, and near to the ileo-cœcal valve. The cavity is filled with purulent-looking fluid, and appears to have been formed by pseudo-suppuration of one of the mesenteric glands.

About eight inches above the ileo-cœcal valve is an opening, ⅓ inch in diameter, leading into the interior of the ileum. Attached by one point to the edge of the aperture, hangs some deep yellow tough shaggy-looking tissue, apparently composed of the remains of that portion of the peritoneum by the sloughing of which the aperture was formed.

In the cavity of the pelvis is a considerable quantity of turbid yellow fluid, with particles of fæculent matter diffused through it.

The convex surface of the liver is covered with a purulent-looking matter, and adhesions very readily broken down have here and there formed between the liver and the diaphragm; the convex surface of the spleen is similarly affected; the peritoneal surface of the stomach offers a beautiful specimen of redness of a serous membrane, characteristic of inflammation.

The *mesenteric glands* are generally enlarged, purplish red, and softened; the one which has been the seat of the pseudo-suppurative process before referred to, is about the size of a walnut; the portion of that gland undestroyed is soft and red.

The *mesocolic glands* are soft, friable, and palish purple.

Stomach partially distended, moderately rugose, mammillated, with the exception of the great cul de sac, of a pale dusky grey colour; consistence normal.

Duodenum.—Vessels rather more filled with blood than usual. The mucous membrane of the lower three feet of the *ileum* softened. About 22 inches above the ileo-cœcal valve is an ulcer measuring ¼ inch by ½ inch; its edges slightly elevated and bright red; its floor pale, and formed of transverse muscular fibres; then follow three ulcers closely resembling the last described, except that the floors of the two first are bright red, and that of the third covered by a thick mass of sloughy-looking yellow matter. The ulcer in which the perforation has occurred is 1 inch in breadth and 1½ inch in length; its long axis corresponding to the long axis of the intestine; its edges, scarcely elevated above the adjacent mucous membrane, are speckled with bright red; its floor, deep red, is formed of transverse muscular fibres, and in its

centre is the aperture seen externally, with the yellow slough attached at one point to its margin. There are two large ulcers between the one in which the perforation is seated and the ileo-cœcal valve; the floors of these ulcers, like the floors of those seated higher in the intestine, are formed of transverse muscular fibres. The mucous membrane of those folds of the intestine which have fallen into the pelvic cavity, is of a dusky reddish hue; it is in the lowest of these pelvic folds that the perforation has occurred; the mucous membrane of the last six inches of the ileum is quite pale.

With the exception of the lowest three feet of the ileum, the mucous membrane of the jejunum and ileum is pale, and of normal consistence.

The ulcers are all placed on that side of the ileum which is opposite to the mesentery, and are evidently seated on Peyer's patches. There is no enlargement of the patches above the first ulcer, but from that to the ileo-cœcal valve every patch is extensively destroyed.

The solitary glands at the lower part of the ileum are very distinct, and of a dull white colour.

Cœcum pale, and healthy in all particulars.

The *colon* was not examined.

The *liver* weighs 4lb. 9oz. It is firm as in health, and moderately congested. The congestion is central.

The *gall bladder* contains a moderate quantity of bright orange-coloured bile. Its lining membrane is perfectly healthy in appearance.

Spleen 10oz. in weight; is slightly softened; not particularly dark.

The *pancreas* weighs 3oz. It appears healthy.

Kidney.—The right one is wanting; the left weighs 11oz. It is slightly congested, but in other respects healthy; its capsule separates readily; its surface is smooth. Lining membrane of the pelvis of the kidney pale.

Mucous membrane of the *urinary bladder* pale and healthy.

It is very rare for perforation to occur so early in the disease as the ninth day. Yet, in the case of John P., it must have taken place on or before that date. It is worthy of note, that he lay with his legs extended till the last,—that he never complained of pain in the abdomen,—and that the nurse, an intelligent woman, observed nothing in his appearance to indicate approaching dissolution. How different from the symptoms occasionally present when perforation occurs. How different from the symptoms ordinarily assigned as those of perforation. The severe vomiting, then, was the only symptom to indicate the complication which so rapidly caused death. Yet John P. was neither somnolent nor delirious; the nurse had been repeatedly at his bedside during the day, on account of the incessant vomiting, and he spoke to her sensibly and collectedly not more than four minutes before he died. The slight but decided tenderness of the hypogastric region present, at the time of my visit on the eighth day, was probably due to localized inflammation of the peritoneum, the consequence of the softening and pseudo-suppuration of the mesenteric gland. It is evident that if the peritoneum had given way over that gland, all the symptoms of perforation of the intestine might have occured, and yet that lesion not have been present. I shall adduce, in the next paper, a case of this kind. Tenderness limited to one part of the abdomen, even though it follow sudden severe pain, and be accompanied by symptoms of collapse, is of no value as a diagnostic sign of perforation. The aperture in the intestine was formed by sloughing; the slough was yet attached at one point to the margin of the opening. This case illustrates one mode, then, by which perforation of the gut may be effected in typhoid fever. There are two others,—namely, *by rupture*, the peritoneum is exposed by ulceration, and thus that delicate membrane, perhaps as Chomel supposes from distension by flatus, gives way at the most attenuated point; or the opening may be formed *by ulceration*,—*i.e.*, molecular death. The aperture formed by rupture or by molecular death (ulceration) is small, sometimes not larger than a pin-point; if the consequence of sloughing, as in the case of John P., the aperture may be much larger. The pain experienced is by no means in proportion to the size of the perforation. I have before referred to a case in which the patient suffered acutely; after death the opening through the peritoneum was not larger than a small pin-head. In the case here detailed it was the size of a fourpenny piece; and yet no single word or look indicated that the man endured a pang. Be it observed, also, that the patient who suffered so acutely was delirious before the perforation occurred; and that John P., who suffered nothing, was in the possession of all his mental faculties—that his powers of perception were unimpaired up to four minutes before death.

It is far more common (as in this case) for the transverse than the longitudinal muscular fibres to be laid bare; when exposed by ulceration they are ordinarily large and red.

The condition of the mesocolic glands renders it highly probable that the colon was the seat of ulceration; but, unfortunately, it escaped down the pipe of the sink into the cesspool before it was examined. The size of the spleen was indicated by the extent of dulness present during life. Its weight was considerable, considering the man had been ill nine days only when he died; but then it must be borne in mind, that the intestinal lesion was very extensive for the period of the disease at which John P. died. As bearing on the same point, *i.e.*, the rapid course of the disease, it is interesting to note that this man was obliged to quit his work directly his illness began, and never left his bed after the second day of illness,—facts indicating clearly the extensive injury the disease had inflicted on the system at large, even at that early period.

Case 33.—In a female aged 36 years—gradual commencement of illness—repeated rigors followed by sweating—headache—loss of appetite—confined bowels—sense of weakness—moist slightly-furred tongue—repeated sudden pain in the abdomen followed by slight tenderness—marked emaciation—vomiting—tenesmus—*death* on about the forty-sixth day of disease.

Forty-eight hours after death.—Lymph and serosity in left pleura—imperfect consolidation of inferior part of left lung—lymph and serosity in peritoneal cavity—perforation of the ileum—ulceration of the ileum—spleen rather large.

Jane H., aged 36, a servant, a large-made, thin, and rather dark woman, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, September 5th, 1848. Her general health, before her present illness, had been tolerably good, but she had suffered occasionally, after eating, from pain at the epigastrium, and flatulence.

Jane H. had resided in London two years. She had lived in her present situation, 17, Albany-street, only three weeks. Her mistress stated, that she had not appeared well from the moment she entered her service. Before that she had for some time suffered from privation of food.

The history the woman herself gave of her present illness was, that about a fortnight before her admission she was seized in the night with rigors; the rigors were repeated several nights in succession, and were on each occasion followed by sweating. At the same time, she began to suffer from headache, loss of appetite, nausea, pain, and general soreness of the limbs. During the whole of this time her bowels were confined. She continued her household duties till the morning before her admission, though often obliged to lie down during the day.

On her admission I noted as follows:—

About 16*th day of disease*.—Little sleep last night, and that disturbed; no headache; mind quite unaffected; with the exception of an unpleasant taste, and imperfect sense of odours, the special senses normal; no increased vascularity of conjunctivæ; some heaviness of expression; complexion dusky; face pale.

Says she feels very weak, at the same time she can walk without assistance; tongue slightly furred, moist, large, red; one stool; no appetite; some thirst; no fulness, resonance, tenderness, nor gurgling in abdomen.

Pulse 108; no cough; no abnormal physical chest-signs.

Skin warm, perspiring freely; no spots.

From this date till the 15th of September there was little change in her condition. The bowels never, or very rarely, acted without the administration of castor oil, three or four doses of which aperient were at different times administered. Rose spots, although repeatedly looked for, were never found. She generally passed restless nights. Her tongue continued as on admission. Her pulse varied from 96 to 108.

On the 18th September, *i. e.*, *about the* 28*th day of disease*, "Pulse 90; skin cool; she had slept well the preceding night, no restlessness; tongue clean and moist; one stool; no appetite."

She was considered to be convalescent; but on the 26th and subsequent days I made the following notes:—

26th September.—Slept well last night; this morning early was *suddenly seized with severe pain in the abdomen*; altogether it lasted several hours, *alternately ceasing and*

returning. Is now lying on her back; legs extended; skin warm; tongue moist and furred; abdomen somewhat fuller than natural, and slightly tender; has passed three stools since the pain in the abdomen commenced; pulse 120; calomel 3 grains, opium ½ grain directly, castor oil ½ ounce in two hours.

27th.—Pulse 120; skin hot and dry; little sleep; face flushed; tongue as yesterday; four stools; suffered from severe pain in the abdomen about six a.m.; no fulness of abdomen, slight tenderness.

28th.—Pulse 108; skin hot and dry; some sleep; face flushed; occasional pain in the abdomen; tongue moist, furred, dirty white; two stools, solid and lumpy; the calomel and opium pill was repeated at bed time, and a senna draught prescribed for the morning.

29th.—No note made.

30th.—Pulse 120, very weak; skin cool, moist; hands cold; dozed occasionally during the night; about eight o'clock severe pain in the abdomen, followed by vomiting of about 8 ounces of dark green fluid; complains now of nausea; has passed four dark and lumpy stools during the last 24 hours; considerable tenderness in the region of the liver, and generally over the right side of the abdomen; tongue moist, covered with thick yellow fur; eight leeches were applied over the region of the liver, a blister to the same part, and a simple saline effervescing mixture was prescribed.

Oct. 1.—Pulse 118; rather more power than yesterday; skin warm; dozed a little this morning; no return of severe pain; at the present time no pain in abdomen, a little tenderness; lost but little blood from leeches; blister rose but little; tongue red, dry in centre; bowels very much relaxed, stools watery, greenish; used bed-pan, felt too weak to leave bed; has emaciated considerably the last few days; no return of vomiting; no nausea; complexion clear; much thirst; omit the mixture.

Oct. 2nd.—Pulse 96, stronger; no sleep in consequence of noise in ward; complains of some pain in the left side of the abdomen; tongue moist; no vomiting; two stools; less thirst. Mustard-poultice to be applied to the left side of the abdomen.

3rd.—Pulse 96; slept well; pain in left side of abdomen gone; tongue same; four stools, scanty, dark; much thirst; some nausea. Mercury with chalk four grains at bed-time, castor-oil half an ounce in the morning.

4th.—Pulse 96; slept well; no pain in either side of abdomen; no fulness nor tenderness of abdomen; tongue rather cleaner; four stools, less dark; no nausea; no appetite; much thirst; face flushes occasionally.

5th.—Pulse 90; little sleep last night in consequence of pain at the lower part of abdomen; some fulness and slight tenderness in the right iliac fossa; tongue the same; four or five stools, scanty; some tenesmus. Linseed poultice to be applied over the abdomen.

6th, about the forty-sixth day of disease.—Pulse 100, weak; little sleep; pain in lower part of abdomen the same; tongue cleaner, moist; five or six scanty stools, solid, dark; complains much of tenesmus; mind wanders a little, but she answers questions rationally. A simple enema to be administered to-night.

The enema was administered about 7 p.m.—it acted in fifteen minutes, bringing away some dark, lumpy stool. About 8 p.m. she became suddenly much worse; at 10 p.m., her skin was cool, and covered with perspiration; the countenance expressed collapse; the features seemed sunk; the breathing was very quick; the pulse rapid and weak; the abdomen rather tumid, and somewhat tender. She continued sensible to the last, and spoke to the nurse an hour before her death; at that time the surface of the body was cold; she dozed at intervals, and *died* without a struggle at half-past 12 at night.

The body of Jane H. was examined forty-eight hours after death. The body was greatly emaciated. Cadaveric rigidity well marked in the upper extremities, less so in the lower; the abdominal parietes had a greenish hue, excepting about the umbilicus, where they still retained their normal hue; numerous large *sudamina* studded the sides of the thorax and abdomen; a few very small ones were scattered over the anterior surface of the whole trunk. The *brain* and its *membranes* were in all respects normal. There was no enlargement of the cervical glands; the *larynx* and *trachea* were perfectly healthy in appearance. About one and a half ounce of serosity was found in the *right pleura*; the *right lung* was perfectly healthy.

In the *left pleura* was about one and a half ounce of serosity, with shreds of gelatinous looking lymph floating in it. On the pleura covering the lower part of the inferior lobe of the left lung were a few threds of soft yellow lymph; at places the thin layer of lymph could be stripped off. Numerous minute crimson points studded the pleural surface of the lower part of the inferior lobe. The vessels of the costal pleura for nearly its whole extent were finely injected with blood. The pulmonary tissue of the inferior portion of the inferior lobe of the *left lung* was darker in hue, and contained less air than the other parts of the lung. Elsewhere the pulmonary tissue, with the exception of a small mass of soft, friable, cheese-like mass, of a dull yellowish colour, at the apex of the inferior lobe, was healthy.

The *bronchial tubes* contained a little frothy colourless mucus; their lining membrane was pale and healthy.

The *bronchial glands* contained several cretaceous masses.

In the *pericardium* was about 1½ oz. of slightly turbid serosity;(a) the membrane itself was pale and transparent.

The substance of the *heart* was flabby, but in other respects it was healthy-looking. The valves appeared normal.

The *tongue* was slightly furred; the *pharynx* and *œsophagus* pale and healthy-looking.

On opening the abdomen the peritoneal surface of the intestines was found highly vascular; the redness was ramiform and capillary; it was most marked towards the inferior half of the abdomen. Several ounces of dirty seropurulent looking fluid, with large shreds of yellow lymph floating in it, were removed from the peritoneal cavity.

Near the lower part of the ileum was a fold of that intestine, the two portions constituting which were for a short distance closely adherent to each other. Just at the point where the two portions of the fold separated, and in the half next the cœcum, was a small round aperture, formed by perforation of all the coats of the intestine, from which a thin dirty gruelly-looking fluid, closely resembling that found in the abdominal cavity, could be pressed in considerable quantity. A knuckle of the ileum, situated about 4 inches above the ileo-cœcal valve, adhered, by tolerably firm and thick lymph, to the abdominal parietes of the right iliac fossa. Folds of the same intestine contained in the pelvic cavity, and situated just above it, adhered to each other, to the fundus of the uterus, and to both ovaries, by thick firm yellow lymph, evidently of recent formation. The fundus of the uterus and the peritoneum lining the post-uterine pouch were covered by a layer of tolerably firm yellow lymph, capable of being torn off in flakes or laminæ.

The *mesenteric glands*, especially in the vicinity of the lower part of the ileum, were large, and deep purple and soft.

The *pharynx* and *œsophagus* were pale and healthy.

The *stomach* was, with the exception of some linear white softening of its mucous membrane in the vicinity of the fundus, healthy in aspect.

The mucous membrane of the *duodenum* was stained of a yellow colour; of the *jejunum and ileum* generally pale.

About three feet above the ileo-cœcal valve, at the inferior portion of one of Peyer's patches, was a grey spot about half an inch in diameter, the centre of which was pale, smooth, shining, and slightly depressed, evidently a healed ulcer. From this point downwards every Peyer's patch was of a more or less deep grey colour, and on every one were seated, superficial, or healed ulcers. Between the patches were several small round ulcers, with deep grey edges and pale floors. About nine inches above the ileo-cœcal valve was a perforation of the intestinal coats; the aperture about ⅜ths of an inch in diameter, was seated on one of Peyer's patches. Perforation of the intestinal coat had occurred through the next patch, but effusion of the contents of the bowel had been prevented by adhesion between intestine and the fundus of the uterus. On this same patch were two ulcers, the floors of which were formed of transverse muscular fibres. On the large patch next above the valve, were several small superficial ulcers, and smooth, slightly-depressed, pale, shining spots, with grey margins,—evidently healed ulcers. The mucous membrane of the lower part of the ileum, between the Peyer's patches, was slightly softened, pale, and had an opaque aspect.

(a) The serosity found in the pericardium after death may be turbid from the diffusion through it of the epithelium scale of the serous membrane detached by decomposition. The microscope reveals, in such a case the cause of the turbidity.

The mucous membrane of *cæcum* and *colon* was pale, and healthy in every respect.

The small intestines contained a large quantity of thin, dirty, gruelly-looking fluid; the large, some solid pale yellow fæces.

The *liver* was very flabby, and of a uniform dirty green colour, from the action of gases generated after death.

The *gall-bladder* contained half an ounce of bright yellow bile.

The *spleen* weighed $7\frac{3}{4}$oz; it was pale and flabby, but not particularly soft.

The *pancreas* and *kidney* were flabby, but in other respects normal.

The uterus was covered by a thick layer of lymph, and the ovaries imbedded in a similar substance.

This was one of the most marked examples of *latent* typhoid fever I ever witnessed. During the whole course of the fever, the mind was in *all* respects as in health. Loss of appetite, quick pulse, disturbed sleep, slightly furred tongue, and sense of weakness, were all the positive symptoms when Jane H. came into the hospital, on about the 16th day of disease. Nor had the symptoms been at any time before her admission more severe. Subsequently her bowels were confined—dose after dose of castor oil being administered, in order to procure one stool every day or two. Rose spots were carefully sought for daily, but not one could be detected. On the 28th day of disease, with the exception of want of appetite, she appeared convalescent, and was allowed to leave her bed. The severe pain on the morning of the 25th of September, that is, of the 36th day, followed by slight tenderness of the abdomen, was probably the consequence of the first perforation, that which after death was found obliterated by adhesions. The intermittent character of the pain certainly misled me in appreciating the nature of the case. I was very particular in my inquiries on the point, and the woman clear in her answers. Tenderness of the abdomen is not unfrequently observed after severe attacks of colic, without inflammation being present. It was curious to remark the way in which the pain recurred, at intervals of many hours, for three or four days, and then its extreme severity on the 40th day, followed by vomiting of dark green fluid, the passage of lumpy stools, and the limitation of the tenderness to half the abdomen; the latter rendered it improbable that effusion of the contents of the bowel into the peritoneal cavity had taken place. When the pain was felt in the left side of the abdomen the pulse had fallen to 96, and in all respects the patient appeared mending. Yet no very urgent symptom announced the occurrence of the lesion, nor did she appear so near her end as she really was at the time I saw her on the 46th day. Could it have been that the peritonitis, lymph, &c., was due to the first perforation; the sudden collapse, four and a half hours before she died, to the second perforation? On the whole, perhaps, this is the more rational explanation of the relation between the symptoms and lesions.

Constipation was a prominent symptom throughout; this is by no means a favourable symptom. I have seen other cases in which it was marked terminate in the same way, *i. e.*, by perforation. Tenesmus is not often complained of in typhoid fever, even when the colon is the seat of ulceration. A large number of the ulcers in the ileum had healed, and many were healing, when this woman died, yet two or three had passed into chronic ulcers. These—the atonic ulcers of Rokitanski—are especially liable to lead to perforation. The fever had terminated by the 28th day, but two or three of the many ulcers, the consequence of the fever, continued to progress after the cessation of the primary disease, just as pneumonia or pleurisy, set up during the progress of the fever, may continue long after that had terminated, and ultimately may cause the death of the patient. There was no puckering of the intestinal coats towards the cicatrix of the ulcers. My experience is in accordance with Rokitansky's assertion, that contraction of the calibre of the intestine is not one of the sequences of typhoid fever. A smooth, shining, depressed, and not a puckered spot, indicates the previous site of the typhoid ulcer.

At what date did the pleura become inflamed? It seems probable that it was affected secondarily to the peritoneum, by extension, just as the pericardium sometimes becomes involved in the diseased action, when the pleura is the seat of inflammation. If this view be correct, then the pneumonia, still in its first stage, and small in extent, was secondary to the pleuritis. The pulmonary tissue being involved also by extension.

Was the slight turbidity of the serosity found in the pericardium due to particles of lymph or granular corpuscles? Or was it the consequence of the presence of detached epithelium scales? If the latter, the turbity was the result of changes effected by incipient decomposition; if the former, of inflammation by extension. (a) The microscope could have determined the question in an instant. I omitted to apply that test.

ON THE RELATIVE SYMPTOMATOLOGY OF THE CRANIAL AND ABDOMINAL VISCERA IN CHILDREN.

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When we reflect on the brain as intimately concerned in every thought and feeling, and on the interlacing of the various nervous tissues (of which it is the focus) throughout the body, we see how closely it must be associated with every morbid action.

The slightest mental emotion, especially in sensitive systems, is constantly influencing the functions of the abdominal viscera, as indicated by vomiting, diarrhœa, diuresis. On the contrary, how often do the various conditions of these viscera, especially those engaged in the process of assimilation, affect thought, feeling, and even mental development. The relative influence of the thoracic organs and of the cutaneous surface with the encephalon, are less immediate and more physical. The convulsive actions and cerebral disorder, during the efforts of pertussis, are chiefly mechanical; and the cerebral maladies resulting from the recession of increased or morbid action from the surfaces, may be regarded more as vicarious or metastatic movements. Their consideration would here prove too discursive. *This* paper will therefore refer only to the *sympathies* of the brain and abdomen. The most careful and experienced pathologist will confess the frequency of his dilemma regarding their diseases, as the question of cause and effect or primary and secondary disorder. Yet, if ever a correct diagnosis be essential in the adoption of remedy, it must be especially in the early maladies of infancy.

In the premonitory stage of *acute hydrocephalus*, one of the most prominent symptoms is the onset of erratic pains, especially in the abdomen, (combined with signs of mucous irritation,) which is often assuming a tumid condition. These signs are especially prominent if there be any development of strumous diathesis. During the stage of turgescence, also, the onset of that morbid process, (which, if unsubdued, so constantly ends in effusion,) constipation, is almost invariably a prominent symptom. The evacuations, when they are obtained, are crude and undigested, and putrid, as if, from defect of innervation, the process of digestion had failed. An error in diagnosis, it is true, would not lead to much error in practice, as the relief of constipation, which would, of course, be aimed at, is an essential part of general treatment.

The condition of the liver is also especially blended with the study of cerebral effusions. Acute hypochondriac pains are often the first symptoms of that form of hepatic disease which, even after these pains have ceased, progresses, imperceptibly perhaps, towards induration, or other change of the viscus, which, becoming chronic, ends often in producing that formidable state which we often discover in combination with hydrocephalus.

It is not improbable that this combination may tend to explain the discrepancies of the cerebral and abdominal hypotheses of the English and French pathologists regarding the proximate cause of fever.

It is clear, then, that there are important reciprocal actions evinced by the cranial and abdominal viscera. We have elsewhere enumerated a variety of illustrations of this truth, drawn from our own and others' experience.

Even the hyperacute wasserschlag, rare as its occurrence

(a) Dr. John Taylor pointed out this as one of the causes of pericarditis, in his highly philosophical examination of the causes of that disease, published in the "Transactions" of Royal Medico-Chirurgical Society.

may be, has been often traced to the sudden checking or spontaneous cessation of infantile diarrhœa or dysentery; and, if we may judge from the nature of the fluid, even a specific morbid action seems to be assumed by the exhalent vessels. We must refer many symptoms, also, to that unexplained influence which selects certain nerves and vessels, and induces them to evince increased sensibility, or to take on *undue* actions, and we may have a variety of remote effects from one exciting cause. The distribution of nerves, however, may often elucidate the origin or seat of the cause. We must look, for instance, to the course of the spinal nerves in the etiology of constipation; to the eighth pair in that of dyspepsia, &c.

It is from the commencement of the process of dentition that we are called to study these combinations, to decide whether the causes, either exciting or proximate, be cerebral or abdominal; an investigation especially perplexing when the premonitory stages have passed away. This period of infancy is especially associated with our subject. Long ago Dr. J. Clarke observed, "In families where children have fallen sacrifices to acute hydrocephalus, if a child should survive the age of dentition, it is rarely afterwards attacked by phrenitis." The excitement of dentition depends on a combination of causes. Simple erethism may result from a momentary sensation of pain in the gums, and this is necessarily increased if many teeth are passing at the same time, or if there be a relative disproportion of the alveoli or sockets of the teeth. A rush of blood (increased determination, as it is termed) will ensue, both to the bed of the tooth and to the encephalon, the same great trunk leading to both, and there being free inosculation of the cranial vessels. During the erethism of dentition, the supervention of abdominal derangements is constant. These maladies are protean in their character: diarrhœa in its various forms, or sometimes the opposite extreme—inertness of the chylopoietic viscera—being the immediate effects. The remote consequences of the first will be muco-enteritis, ulceration, and marasmus; of the second, remittent fever, and the various forms of convulsive actions.

The *re-action* of these maladies on the seat of their cause, or on the encephalon, especially enhances our dilemma.

In otherwise healthy children, however, the effect of this influence may consist merely in an *exalted predisposition to be acted on*—an excitability clearly dependent on the delicate texture of the infantile tissue and its incessant *change*, and this especially of the encephalon.

We cannot, therefore, wonder when we observe cerebral *symptoms* so constantly become prominent at the period of dissolution; or that we are warranted, by the elucidation of dissection, in referring to the morbid condition of the encephalon, or cerebro-spinal system, as the frequent source of fatality, although, perhaps, more evident lesions may be discovered in remote organs.

The death of infants is constantly characterised by convulsive action; it is the last evidence of vitality. I have been much, and unjustly, censured for referring to this point in a brief monograph on the subject of cerebral disease; but I have no doubt of the correctness of the observation, and I would here again point to the importance of cerebral pathology, especially in the *latter* stages of infantile disorders, as the eruptive fevers, pertussis, &c., &c.

The irritability of the mucous membrane may be latent or quiescent until ingesta, improper in their quality or quantity, are admitted, and then, without any *evident* premonitory cerebral signs, diarrhœa, often formidable, supervenes as a primary disorder.

We must yet remember that diet may not be *essentially* but *relatively* improper, in consequence of this sympathetic irritability, especially of the mucous surfaces. Thus an excess of gastric acid may curdle the milk into cheese, these coagula often remaining behind, keeping up the irritation and protracting the disease, while sour yellowish water is profusely discharged—the condition of infantile cholera. On other occasions the crude lumps will be suddenly dislodged like pellets from a pop-gun; while, from a total deficiency of bile, the contents of the alimentary canal, both above and below the cœcum, will be alike non-fæculent, assuming often a greasy consistence, which seems to be either vicarious of the biliary flow, or dependent on the absence of the chemical action of bile. The *character* of evacuations is a subject of much interest, although I think Cheyne, Fothergill, and Gölis have placed too much dependence on them: we must not, however, at present pursue it.

In the first stage of encephalitis, the sensibility being in excess, the various sympathies of the brain become prominent. There is constant vomiting of milk, almost in the moment after it is swallowed, without coagulation; and this is combined with obstinate constipation,—the upper part of the alimentary canal being highly irritable, the lower apathetic. It is, as it were, a sort of inverted action, somewhat analogous to that indicating volvulus and hernia, or an instinctive provision to prevent the introduction of diet which *cannot be passed on nor evacuated.*

In the stage of effusion the stomach becomes more apathetic; the constipation still continuing if the effusion be in the central portions of the brain. And this constipation is most stubborn, seldom yielding to medicines given by the mouth, but only to enemata and to stimulant frictions, as with aloes, soap liniment, &c. Even in primary disease of the brain, therefore, the state of the abdomen is not to be disregarded. Indeed, it is often a valuable point of diagnosis.

When there is little or no alvine flux to account for it, the belly is often seen to *fall in;* whereas, if there be stubborn *idiopathic* constipation, the belly will soon become tumid.

Even in the simple state of cerebral erethism there are fretting and tossing of the head. If the abdomen be the first affected, the cry is more of a whine or moan, and the legs are more or less drawn towards the abdomen.

The *changes* from excitement to depression, and *vice versâ*, may be considered a fair diagnostic of *primary* cerebral disorder; so that we may observe more of a division into *stages* in cases of meningitis or acute hydrocephalus. The fever excited by worms or other internal irritation, although remittent, is more persistent. With this also there are more or less dryness, *cracking*, and itching of the lips, and withal often an *impulsive* or voracious appetite.

When cerebral symptoms *supervene* on diarrhœa, the action is usually sooner or later altered. Constipation will ensue, and we constantly perceive the fontanelle, which had been depressed, become convex or prominent. There is then set up a train of symptoms which seem to be relative to each other. The secretions, even that of the kidneys, are suppressed, and coma soon supervenes—the consequence of cerebral or vicarious serous effusion: turgescence, perhaps depending, in some degree, on the non-elimination of urea by the renal organs, and its contamination of the blood.

When, therefore, a deranged condition of the bowels exists; when the evacuations *continue*, notwithstanding our endeavours, watery, sour, and discoloured, and there is a scanty secretion of urine, we must closely watch the state of the head, as the child is hence *predisposed* to disorder. Spontaneous diarrhœa, however, which is easily distinguished from the flux of muco-enteritis, may be set up for a time as a pure vicarious action or natural effort to relieve; and within certain limits it is salutary. We must therefore pause ere we attempt to check it. To relieve this *prominent* symptom may be replete with peril, the excess of action being thrown back upon the encephalon.

Gölis also remarks, "Suddenly suppressed diarrhœas and dysenteries I have often seen followed by the water stroke; in rarer cases by the acute hydrocephalus." And this opens a very important question, to which the answer may be almost aphoristic; viz., that when two membranes, one serous, the other mucous, are disordered or in danger, our effort should be to defend the former in preference to the latter.

The slight disorders of the mucous membrane will constantly cure themselves; even when excessive, for a time they relieve their own plethora, and *ward off* from the more important tissue, as the arachnoid, which, being a sort of shut sac, and having no immediate outlet, becomes oppressed by its products, so as either to disorganise its own, or compress other important vital tissues. The cerebral symptoms will often subside as mild diarrhœa is established. We must, however, distinguish between it and the hypercatharsis of calomel and drastic purgatives, which may soon end in disorganisation of the mucous tissue. Diathesis and locality also, are not unimportant points in the formation of diagnosis.

The plethoric child, in whom the senses are hyperacute, is more prone to primary disorder of the encephalon; the pallid child, with flaccid or tumid abdomen, in whom there is an obtuseness of sense and sensibility, to primary affections of the abdomen. The rule is, of course, subject to exceptions. Indeed, the strumous child is constantly in

peril of cerebral affections during intestinal disease, and we may sometimes even observe the cerebral to be the prominent symptoms, while the chief proximate cause may be intestinal.

But the strumous child is constantly in danger of sudden effusion in any of its serous cavities. The wasserschlag may, in a few moments, prove fatal, when our attention has been almost absorbed with the abdomen. On this very day I have examined an infant two months old (prematurely born), in which, in consequence of its strumous taint, the symptoms, both cerebral and abdominal, were blended and masked. There was never, indeed, any acute or prominent symptom except a soporose tendency from its birth, and some slight flinching on pressure of its left-side. Yet, I believe, a subacute or chronic action had been proceeding from that hour in the intestines. Sudden effusion ensued about two days before its death. Although the child seemed to thrive, so much so as to impart confident hope to its relatives, there was extreme *ramolissement*, almost a pulpy state of the stomach, with several inflammatory patches on the small intestines, and withal more than two ounces of serum within the ventricles. This was a marked instance of the almost *universal* tendency to disease in scrofulous children.

In those children who inhabit unhealthy localities, in which atmosphere and water are necessarily tainted, we constantly witness this almost *jumble* of morbid affections, the pathology of which is an intricate study.

The mucous membrane, with its glands, are prone to run into ulceration, ending, perhaps, with cerebral effusion; but ever assuming in the course such an obscurity of signs, as to place us in a state of painful dilemma.

The evacuations are commonly particoloured, sometimes of a pink hue; they are slimy, or crude and pasty, and are rapidly passing through the intestines. The orifices of the lacteals become sometimes coated by pultaceous masses resembling chewed paper, in quantity more profuse than the ingesta; the mesenteric glands and the peritoneum partake of the disease; assimilation is of course at an end, and tabes is progressive, the child often dying within a month.

There is often a brief yet fallacious indication of increased power, but it is the flickering of a convulsive struggle closely allied to the hæmorrhagic effort, during which symptoms of apparent cerebral excitement (the hydro-encephaloid disease of Marshall Hall) may lead to the erroneous adoption of depletory measures, instead of that cordial and nutrient plan so essential to the safety of the child.

I have thus endeavoured *briefly* to elucidate some of the obscurity which marks the pathological relation of the encephalon and abdomen. The minute points must be left to those whose attention during practice is constantly directed to these disorders.

8, Storey's Gate, St. James's-park, July 1850.

CONTRIBUTIONS TO PSYCHOLOGICAL MEDICINE.

By N. PARKER, M.D. Lond.,

Lecturer on Microscopical Pathology in the Medical School of the London Hospital.

No. I.

ON THE SCIENCE OF THE MIND, OR PSYCHOLOGY; ITS RELATION TO PHYSICAL SCIENCE AND TO MEDICINE.

"The difficulty of proposing a satisfactory theory of the human mind, must have been felt by every person who has touched this delicate string since the days of Aristotle. It is, therefore, not astonishing, that the knowledge of the derangement of the mind is so little understood. Physiology naturally must always precede pathology."

If an untutored American Indian were to be suddenly taken from the gloom of his aboriginal woods, and placed in the midst of one of the capitals of civilised Europe, with what surprise and admiration, not unmixed with awe, would he survey the varied scene around him. Viewing its sumptuous palaces, its magnificent roads and bridges, its railroads and ships, the numerous means of locomotion by land and by water, its treasures of art and wonders of science, all the manifold means and appliances by the aid of which the stubborn agents of Nature have been subjugated and directed to useful purposes by the fertile genius of man, he would be irresistibly led to the belief, that powers and capacities immeasurably superior to his own had been bestowed upon the inhabitants of that favoured spot. And his wonder would perhaps be increased, when he became acquainted with the source whence all these advantages were derived,—when the great truth was unfolded to him, that they were all won by the proper cultivation of man's faculties, by laborious exercise and assiduous application, by the cumulative energy of an inherent principle common alike to every member of the human family,—that they were, in fact, slowly acquired by industry and perseverance, and were, after all, but an incomplete and imperfect evidence of the progressive development of the human mind, and of its victory over the material world.

THE SCIENCE OF THE MIND OR PSYCHOLOGY, AND ITS RELATION TO PHYSICAL SCIENCE.

The powers and capacities by the aid of which this victory has been achieved, and which in the aggregate we term *mind*,—the higher and nobler part of man,—are to be the subject of our study. We purpose to investigate the physiology and pathology of the mind, that is, its various phenomena or manifestations in health and disease. Psychical science, pneumatology, or psychology, as it is termed, has for its object the consideration of everything relating to the spiritual part of man. It has been also termed metaphysics,—a word, says Sydney Smith, "of dire sound and horrible import, which I would fain have kept concealed if I possibly could, which seems likely to produce as much alarm as the cry of 'Fire' in a crowded playhouse, when Belvidera is left to weep by herself, and every one saves himself in the best manner he can." This word "metaphysics" has led many to regard the science of psychology as something beyond nature,—a study wholly separated and apart from that of general physics, and, therefore, not capable of being prosecuted by the same method of research, which, applied to other branches of natural science, has proved so fruitful in results. Deterred by this erroneous view, many a true student of nature has turned aside from its otherwise inviting path. Indeed, at one time, it had wholly fallen into the hands of logicians and schoolmen; observation and the results of experiment were completely disregarded; the method of induction, the only foundation of true knowledge, was neglected; the most abstruse questions were propounded and elaborately solved by subtle reasoning; until at length the science of the mind was resolved into the study of hypotheses, rather specious than profound, ingenious than useful. "When the mass of mankind hear that all thought is explained by vibrations and vibratiuncles of the brain,—that there is no such thing as a material world,—that what mankind consider as their arms and legs are not arms and legs, but ideas accompanied with the notion of *outness*,—that we have not only no bodies, but no minds (for Bishop Berkely destroyed this world in one volume octavo, and nothing remained after his time but mind, which experienced a similar fate from the hands of Mr. Hume in 1737), —that we are nothing, in short, but currents of sensation and reflection; all this, I admit, is well calculated to approximate in the public mind the ideas of lunacy and intellectual philosophy." Such sophisms were only put to flight by the appearance of common sense, in the person of Dr. Reid, upon the scene of controversy. By an appeal to every-day experience he showed that first principles, universally believed to be such, as the existence of mind and matter, must be accepted as truths, and that they are of necessity incapable of proof, or they would no longer be *first principles*. "A great philosopher may sit in his study and deny the existence of matter; but if he take a walk in the streets he must take care to leave his theory behind him. Pyrrho said there was no such thing as pain; and he saw no *proof* that there were such things as carts and wagons, and he refused to get out of their way: but Pyrrho had, fortunately for him, three or four stout slaves, who followed their master without following his doctrine, and, whenever they saw one of these ideal machines approaching, took him up by the arms, and without attempting to controvert his arguments, put him down in a place of safety." The investigation of these and similar problems could not pos-

sibly tend to further in any considerable degree the science of psychology. For the intellectual physiology of man appertains to a great extent to physical, and more especially to medical science. Indeed, the practitioner of medicine can alone be said to be fully qualified to undertake this study, and it should form a by no means unimportant part of his education. Dr. Conolly very justly observes, "As a knowledge of the natural structure and functions of the body prepares the medical practitioner to detect impairments of either, so should he be prepared for the detection and management of diseases affecting the mental functions, by a previous acquaintance with the natural constitution of the healthy mind." The irregular manifestations and hidden mysteries of mind can be duly apprcciated only by those conversant with physiology and pathology,—by such alone can its secrets be successfully unravelled. Indeed, it is the greater degree of attention paid of late years to the management and treatment of the insane, which has given a new and vigorous impulse to the study of the mind; from being made up of a host of abstract definitions, leading to no other result than to mystify and bewilder, it may be said to have assumed its proper place among the natural sciences, as the legitimate offspring of observation and induction.

The being termed man is an intimate compound of spirit and matter; that is, of a mysterious imponderable principle or force, united to, or combined with, material organs. There are in man two parts in intimate union, the one mutually influencing the other. The physical part—the body—is made up of various components, each subserving its own particular function, and all recognisable by the senses; the psychical part—the mind—is likewise manifested in various faculties, which are evidenced to us, not through the senses, but by means of consciousness. But body and mind, although in intimate union, have each their separate mode of being; the laws of the body are not invariably those of the mind,—the principle whereby man perceives, feels, knows, thinks, wills, and acts, and which is made known to us in the perceiving, feeling, knowing, thinking, willing, acting man. Mind and body being thus inseparably conjoined by nature, every attempt to study the one without due regard to the other, must of necessity prove futile; and if in our present inquiries we would arrive at something that may claim to rank as both true and useful, the foundation of the whole superstructure must rest upon a due appreciation of these two integral parts of man's nature.

VALIDITY OF THE SCIENCE OF PSYCHOLOGY.

All true knowledge must ultimately repose upon the legitimate application of our faculties to the particular object of inquiry. It may be asked, then, whether a knowledge of the intellectual physiology of man—of psychology—be possible,—whether it be within the legitimate reach and scope of our limited capacity. This question may, without hesitation, be answered in the affirmative. For psychology has for its object simply the investigation of the faculties of man,—of the laws which regulate the reciprocal action obtaining between the physical and psychical parts of our nature. As causes are known by their effects, so mind is known by its operations. And, the organism being in a state of integrity, we possess each of us the capacity of knowing all the operations of our mind—every thing that passes within us—we can neither feel, think, nor will, without being aware that we do so. The states of our own mind,—the mental operations or phenomena which pass within us, and of which we are aware,—are equally capable of being observed as those which come to pass on the scene of the outward world. The only difference is, that the one are exterior, the other interior. Psychology, in all respects, indeed, resembles one of the physical sciences; it is founded upon observation, and therefore has a just title to rank as a positive science. "The existence of mind is as much a matter of *fact* as the existence of matter: it is as true that men remember, as that oxygen united to carbon makes carbonic acid. I am as sure that anger and affection are principles of the human mind, as I am that grubs make cockchafers, or of any of those great truths which botanists teach of lettuces and cauliflowers." We are accustomed to estimate, as the surest of knowledge, the information of which we are in possession respecting the nature, properties, structure, and composition of the exterior world, and its various modifications and changes. We obtain this information solely by means of impressions which affect our nervous system,—by virtue of the action of exciting agents upon material organs of our body which are endowed with excitability; the result of this action—excitement of the nerves—being propagated to the brain, induces a change in its vital condition; so that, in the last analysis, that of which we are really aware,—that of which we actually obtain knowledge,—is but a change in our internal self. We perceive merely an alteration in the state of our nervous system; in other words, a particular modification of our own internal being. Moreover, our senses frequently deceive us, for we often fancy things to be present when they are not so, as in dreams and mental hallucinations. We have no knowledge but of internal conditions, some of which we refer, usually justly, but at times wrongly, to ourselves as a cause, others to a cause without us,—to some material object. Thus, inasmuch as the ultimate fact of which we become aware is the same in both cases, as regards validity, psychology and physics are equal; and the knowledge to which we attain respecting the objects of the one reposes upon no surer foundation than that to which we can legitimately attain concerning the objects of the other. In the one case as in the other, it is with changes of our internal self,—with mental phenomena,—with our faculties in their action,—that we have to deal.

THE MENTAL PRINCIPLE—ITS RELATION TO OTHER IMPONDERABLE PRINCIPLES.

The term "mind" is employed to signify, not merely the aggregate of our faculties, but likewise the cause of those faculties. Respecting this cause,—the principle which, united to or combined with our material organism, gives rise to the phenomena of mind,—we cannot hope to obtain any very accurate information. On this subject (as on many others) we have theories in abundance, but no well grounded knowledge. This much we *do* know, that the mental principle is revealed to us as the cause of mental phenomena, for the perception of every phenomenon of necessity involves the recognition of a something by which it is produced,—of a cause. The forces of heat, light, and electricity, are known to us simply as causes or producers of phenomena; nor could we have acquired the idea of particular causes or forces without given phenomena; the words "cause" and "force" would be altogether without signification. It is as the producing or originating cause of mental manifestations that we recognise the psychical principle as a force. Moreover, we ourselves are producers of changes,—of phenomena,—both in the external world and in the state of our own mind; we possess the power of originating motion, and of calling up certain given trains of thought by a voluntary act, which we justly refer to the will, which wholly appertains to the mind. Thus is the mental principle revealed to us as an active cause,—as a force. But the manifestation of every force is uniformly found to be dependent upon particular conditions. There can be no evidence of force without a medium through which it may manifest itself; for we recognise forces only when they act upon some medium and produce changes. But it by no means follows that this medium must possess the ordinary properties of matter—must be *material for us*, that is, a something which our senses can detect: for this would be tantamount to saying that all media are recognisable by the senses. The analogy that obtains between mind and light may, perhaps, serve to explain our meaning. Mind in its simplest form—in its primitive operation—is evidenced to us in a *succession of changes* of our internal self,—in the perception of a series of sensations; for, says Cousin, "to inquire what is the first *succession* given us is to inquire what are the first ideas, the first phenomena which fall under consciousness, and form the first succession. Now it is evident that, with respect to our sensations, they are not phenomena of consciousness except upon this condition, that we pay attention to them. Thousands and thousands of impressions may affect my sensibility, but if I do not give them my attention I have no consciousness of them. It is the same with respect to many of my thoughts, which, if the attention is directed elsewhere, do not come to my consciousness, but vanish in reveries. The essential condition of consciousness is attention—the internal phenomenon most intimately allied to consciousness, then, is attention; and a series of acts of attention is, necessarily, the first succession which is given us. Now, what is attention? It is not a reaction of the organs against the impression received. It is nothing less than the *will* itself; for nobody is attentive without willing to be so, and attention at last resolves itself into the

will. Thus the first act of attention is a voluntary act—the first event of which we have a consciousness is a volition. The first succession, then, is that of our voluntary acts." The mind, then, is originally evidenced to us in a series of voluntary acts, that is, like light, as a succession in time of a number of impulses. These impulses must be wrought by a cause, for every effect presupposes a cause. Indeed, as we have before stated, our notion of causes is derived solely from their effects, directly upon matter, or indirectly upon some medium which, in its turn, acts upon matter. Thus, luminous rays are the product of the action of a force—the principle of light—upon an imponderable medium which we vaguely term a subtle ether, and in which the force induces the regular succession of a series of motions or vibrations, occurring with a certain velocity. But were we, as material beings, not provided with a material organ,—with an optic nerve for these rays to act upon,—we should be necessarily unconscious of their existence. This statement is fully borne out by the observation, that the optic nerve of different individuals differs in its faculty of detecting light. The various colours, which are mere modifications of a common principle, cannot all be detected by every person. For some individuals would seem to be provided with an optic nerve which is not affected in the usual manner by a certain series of vibrations, and, therefore, the colours referrible to that series have for them no existence, and they would be quite unconscious that there were such, were they not informed of their defective sense by others. To carry out our analogy, we might say, that a series of impulses occurring in an imponderable medium,—denominate it, if you will, a subtle ether,—and wrought, as in the case of light, by a force, constitutes mind, or gives rise to it by its action upon the nervous system. But, whether we regard mind as the product of the action of this force upon a material or an imponderable medium, or as a purely immaterial principle, we should, in any case, be unaware of its existence; in other words, unconscious of our own personal identity as material beings, were we not provided with organs having a certain established relation with the mental principle, as the optic nerve has with the principle of light, through which, and upon which, it may operate to produce effects, or the manifestation of mental phenomena, just as luminous rays acting upon the eye give rise to visual phenomena. So that the hypothesis, that the psychical force may be a mere condition or mode of activity of some immaterial medium, which the brain does not bring into existence any more than the optic nerve produces light, *but solely reveals to us*, is not only simply within the range of possibility, but quite in accordance with the present state of our knowledge of what would appear to be somewhat analogous principles. The conditions or modes of action of the medium may be present; the force may be in operation without reference to our corporeal being, as luminous rays may exist without an optic nerve for them to act upon; for the principle of mind does not seem to be in any way determined by, or to result from, or to cease with, our material organisation, any more than the principle of light. Nor is the nature of either principle of necessity affected by its relation to matter. The *manifestations* of mind may, indeed do, vary in different individuals; they may be limited or disturbed by faulty conditions of matter, but the phenomena themselves, in their *essence*, remain still the same. As an atom of sulphur appears to manifest different properties in its multiform combinations with oxygen, hydrogen, cyanogen, and iron, but still exists, and can be recovered as an atom of sulphur; so the mental phenomena may be manifested in ever-varying and Protean forms, according to the kind of organisation through means of which they become evinced. Between the *evidences* of mind in a Newton, and those of an ignorant negro, how vast a difference! The range of psychical phenomena, how extensive in the one case, how circumscribed and limited in the other! And yet the dull clay may be in both animated by a spark of the same Promethean fire. Indeed to push our speculations a little further, it may be, that as the optic nerve is acted on by but a very limited series, varying in different individuals, of those vibrations which give rise to the phenomena of vision, that so the brain can evince but a limited and likewise variable amount of the possibly innumerable modes of psychical activity, and that the phenomena of mind displayed by the highest order of human intellect, constitute, after all, but a very inconsiderable series of the sum total of the actual range of mind.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

ON THE FORMATION OF ADVENTITIOUS MEMBRANES IN THE SAC OF THE ARACHNOID.

THE formation of false membranes in the sac of the arachnoid has attracted considerable attention in this country since the publication of Mr. Prescott Hewett's interesting communication to the Medical and Chirurgical Society, 1845. These extravasations, one of the forms of the "Apoplexie des Méninges" of the French, are described as consisting of blood, the fibrine of which gradually loses the colouring matter, and becomes organised. These cases are always cited to prove the possibility of coagulated blood becoming organised, and certain symptoms have been described as indicating the precise moment when the extravasation occurs from rupture of some of the superficial cerebral vessels. I think, with every respect for the highly-talented authors who have written upon the subject, that this opinion as to the character of these adventitious membranes is incorrect, and that the evidence in favour of their inflammatory origin is nearly conclusive. In the first place, they are very uncommonly met with in general hospitals, which receive yearly an immense number of cases of injuries to the head, accompanied by extravasation of blood. They are by no means uncommon in Bethlem Hospital, where most of the patients suffer from congestion or inflammation of the brain and its membranes, and where an injury to the head is an occurrence hardly known.

I never heard of an instance in which this morbid deposit occurred in a person whose cerebral functions had gone on in a perfectly healthy way up to a short time before death. In Mr. Hewett's report, the first patient suffering from phthisis was repeatedly attacked by delirium; the second, after partial recovery from concussion of the brain, suffered from typhoid symptoms, sank into a state of torpor, and died. The third patient, a lady, after having passed through great mental excitement, was suddenly seized with violent pain over the right brow; this was followed by wandering and impairment of the intellectual faculties, coma, and death. The fourth patient, a girl, whose father had died maniacal, and who had lately taken to drinking, was admitted into St. George's Hospital, labouring under phthisis. She had frequent attacks of delirium previous to death. The fifth patient, who was admitted in a state of partial insensibility, accompanied by low muttering delirium, for the last two years had been complaining of his head, but had continued his occupation up to the last six days, when he was suddenly taken ill on the road. I could recount a list of similar cases from the collection of *post-mortem* examinations made by Mr. Lawrence in Bethlem Hospital. A patient suffers from disturbance of the cerebral functions; he dies after a variable period of illness; and after his death there is found a layer of fibrine adhering to the inner surface of the dura mater. It seems to me that, under any other circumstances, this effusion would be regarded as a result of inflammatory action.

It is stated that there are no traces within the skull of previous vascular disturbance; that statement is quite at variance with my observations. I have invariably found the dura mater either highly congested or very firmly adherent to the inner surface of the skull-cap; indeed, so much so, that it has often been impossible to remove it without laceration of the membrane. Let it be remembered that this is the constant effect of chronic congestion of the membranes of the brain during life, and one of the most frequent morbid conditions of the dura mater. It has been remarked that these extravasations are confined to the vault of the skull; I have seen them extend, on both sides, down to the foramen magnum, covering, in a thin soft and delicately yellow continuous layer, the orbital plates of the frontal bones, the ethmoid and sphenoid bone, and the fossa

of the cerebellum. Surely an extravasation of blood so extensive and continuous coming at the same moment from an infinity of minute vessels would be an unheard of phenomenon.

It has been urged that were these membranes of inflammatory origin, the visceral layer of arachnoid would be likewise inflamed, and adhesions of the opposed surfaces would be common. Instances of effusions into true serous cavities, without adhesion of the two surfaces, are of common occurrence. We witness them in the pleuræ; still more often in the pericardium, as has been shown by Dr. Kirkes, in a valuable paper communicated to the *Medical Gazette*. But the arachnoid can scarcely be said to be continued as a membrane over the dura mater—the vessels of that region belong exclusively to the dura mater; consequently, if we wish to indicate with accuracy the precise seat of this adventitious structure, we should call it a false membrane upon the cerebral surface of the dura mater. The morbid conditions of the dura mater are connected with general fulness of the vessels of the head, including the pericranium and the scalp. The morbid conditions of the arachnoid, indicated by thickening and opacity, are always associated with effusion amongst the vessels composing the pia mater. As inflammatory disturbance in these two structures is essentially distinct; and, as the existence of the one by no means implies the existence of the other, there is no cause of wonder why adhesion of the opposed surfaces is rare.

As regards the microscopical appearances of these structures, the evidence is inconclusive, being equally applicable either way. We find the softer parts composed of cells,—the firmer parts composed of newly-formed fibres. Those who regard the false membrane as composed of extravasated blood say, that the former are colourless blood corpuscles, and the latter coagulated fibrine; those who regard it as of inflammatory origin, state that the corpuscles or cells are those commonly seen in all effusions of fibrine, where new structures are to be formed; and that the firmer and fibrous part shows how these cells have assumed their terminal phase of development.

I was requested by my friend Mr. Newton, of Howland-street, to assist him at the examination of the body of an aged lady, who, for many years before her death, had been subject to fits of passion amounting to temporary derangement. She was eccentric at all times, and, being unfit for general society, occupied a part of the house in which a near relative resided. It was believed that she had, at different times, partaken very freely of intoxicating liquors. She died in a state of exhaustion. There had been paralysis of the left side.

The skull-cap was very heavy; the dura mater so firmly adherent to the cranium that considerable difficulty was experienced in tearing away the bone; the parietal layer of the arachnoid (the inner surface of the dura-mater) was lined with a soft yellowish-white and continuous membrane, which extended from the vault to the base of the skull into the foramen magnum. The visceral arachnoid was transparent; the pia mater infiltrated by fluid; the convolutions were shrunken. There were three spots upon the surface of the right hemisphere, where the cerebral substance was softened; the largest equalled a walnut in size, the other two were smaller. There was a smaller softened spot upon the left hemisphere. The viscera were healthy.

The following case is taken from the collection of *post-mortem* examinations of Bethlem Hospital, recorded by Mr. Lawrence:—

Ignatius H——, aged 36, admitted on the Incurable establishment Oct. 9, 1846, died Jan. 27, 1849, in a state of exhaustion after much previous excitement. The blood vessels of the dura mater were turgid; on cutting through the membrane a considerable quantity of reddish fluid escaped. The entire internal surface of the dura mater was lined with a continuous adventitious production of red colour, varying thickness, softish consistence, so as to be easily lacerable, adhering externally with a free smooth internal surface like that of a serous membrane. It was thinnest at the base of the skull, and the superior surface of the tentorium; thicker over the cerebral hemispheres, thickest on the falx, as well as towards the extremities of the anterior and posterior lobes. The thinner part was nearly transparent, and colourless when stretched out, but when folded together it was of decided red colour. It was about the thickness of the arachnoid, where it is seen at the base of the brain, separate from the pia mater, and in some parts approached in firmness to that membrane. The thicker portions were perfectly opaque, nearly as thick as the mucous membrane of the bladder, of a deep dull red colour, here and there as dark as coagulated venous blood, and presenting an appearance like that of partial ecchymoses under the surface. The latter appearance was also observable in some situations where the structure was thinner. On the anterior and outer part of the right hemisphere there was an irregular cavity in the adventitious production, not well defined, nor with smooth surface; it contained some of the reddish fluid already mentioned.

This membrane was well organised: blood-vessels entered it in every part from the adjacent dura mater. Upon tearing it away, the vessels could be seen with the naked eye passing in infinite number, like fine threads, from one membrane to the other; and I succeeded, after some trouble, in injecting a portion of it with size and vermillion, using a small injecting-pipe, recommended to me by Mr. Grog, of St. George's Hospital, who was, I believe, the first to succeed in making an injected preparation of the kind.

The other membranes of the brain showed signs of chronic vascular disturbance. The arachnoid was thickened and opaque, especially along the edges of the longitudinal fissure of the cerebrum. The cellular texture of the pia mater was infiltrated. The vessels of the cerebrum were turgid, particularly those in the cerebral substance.

There was tubercular deposit in both lungs.

The other viscera were healthy. H. C.

MIDDLESEX HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S.L.

SERO-CYSTIC DISEASE OF THE MAMMARY GLAND, AND SCIRRHUS IN THE SAME BREAST.

To-day, Aug. 25th, Mr. Shaw removed the left breast from a woman, which, on subsequent examination, presented the not very frequent complication of these two diseases.

The breast, in its general appearance, presented nothing abnormal, except in one part two inches below the nipple, where a plum-coloured mass, about the size of a small walnut, projected under the skin. The breast having been removed by excision, including a considerable portion of skin, one or two suspicious looking glands were dug out, and the hæmorrhage, which was disposed to be free, having been arrested by several ligatures, the patient was taken away, and Mr. Shaw proceeded to examine the breast. It may be worth while to mention, that a part of the lower edge of the pectoralis major had to be removed, and some parts of the gland of considerable hardness had to be dissected away.

The plum-coloured mass alluded to, the skin over which had now become quite pale, was divided, and presented the appearance of a smooth compact scirrhous growth. It was not lobulated, and lay in close contact with the cutis, and at the inferior edge of the mammary gland, the substance of which it had not encroached upon. The section displayed a radiation of fibrous bands, forming compartments, which contained a minutely granular, pulpy mass, admitting of being scraped off with a knife; but it was scarcely so hard as scirrhus generally is, and at the posterior and inferior part was a portion apparently loaded with clotted blood. The gland, of a milk-white colour, contained in several places small deposits about the size of a pea, closely analagous to this scirrhus, and a gland which was removed was invaded by the same growth through at least two-thirds of its extent. There were also several cysts which contained some a dirty brownish, and others a greenish fluid, and varying in size from that of a large shot to that of a small bean. Their sides were thick and hard, and they looked like occluded milk ducts; the gland was very hard.

On further examination, by the aid of a microscope, the scirrhous nature of the removed mass was rendered certain. The gland, too, was found to be permeated by a number of cysts, some of which contained cells closely analagous to those found in the scirrhus. The identity of this disease with the seroeystic breast of Sir B. Brodie, the third variety of the hydatid breast of Sir A. Cooper, seems, then, to be set at rest. "On dissection," says Brodie, "I have some-

times found the cyst to be so small as to contain scarcely a single drop;" * * * "in two cases in which I had an opportunity of dissecting a breast affected with this disease, I found small cysts, composed of a thin membrane, and containing serum, pervading the whole of the glandular structure, and the intermediate parts of the breast presenting a perfectly healthy and natural appearance, and I could discover nothing more; there seems to be little doubt that the cysts are originally formed by a dilatation of the lactiferous tubes." Those who are familiar with the descriptions given by Sir Benjamin will recollect the malignant appearance which this disease is apt to assume in its later stages, some explanation of which may be found in this discovery of the scirrhus-like cells; a pathological fact of some importance, and which may serve one day as a clue to a more complete knowledge of this disease. It would be interesting to know why it, beginning apparently by a simple dilatation of the milk ducts, which expand to the dimensions and turn to the nature of cysts, rapidly secreting a fluid, sometimes pure serum, sometimes bearing traces of destructive agencies on the fluids, should, in its ultimate development, assume a form closely resembling fungus hæmatodes; but this task we must leave to others. In papers of this kind, all we can do is to sketch with a hasty hand the broad and leading features of a case, a line of treatment, a diathesis, or a disease. Finally, its appearing always after puberty, and its greater frequency in single than in married women, point out a stronger affinity to cancer than to simple unmixed dilatation of the milk tubes.

The position of the scirrhus is unusual, it being generally developed in the skin, or seated on the mammary gland. Mr. Richard Carmichael, in his long list of cases of cancer cured by iron, has only two of cancer below the breast, and it seems doubtful if they were genuine scirrhus. Brodie says: "A hard tumour sometimes forms on the surface of the breast which feels like scirrhus; and, on cutting it, it looks like it; so that I can give the disease no other name. *It appears to be unconnected with the breast;* but when you remove it, you find *that it is attached to the breast, just at one narrow corner.* I have removed *three* tumours of this kind, leaving the breast untouched, except where I separated the tumour from it; and in each of these three cases I learned that the patient continued well a considerable time afterwards. Indeed, I do not know that in any one of them there has been a return of the disease." This practice Mr. Shaw disapproves of, as he considers it very probable that, if the gland were not removed, the disease would reappear in it. In the present instance, it was, under any circumstances, fortunate that it was excised; as, in a scirrhus patient it seems highly probable that the serocystic disease would have ultimately led to its removal by a second operation.

The patient's account of her case is as follows:—She is a servant, verging on 40, unmarried, and has never had any children. In April last she was suddenly seized with a pain below the nipple, followed soon after by alternate chills and flushes; and so strong was the sensation of cold in these chills, that she taxed some of her fellow-servants with having poured cold water down her back. These sensations passed off gradually, but a tingling remained in the part; and in a short time a circumscribed angry flush overspread it. Darting pains were now felt, which continued without intermission till the operation; these became worse at the time of menstruation, steadily increasing in severity, and undergoing no remission. Considering it to be a boil, which would be relieved by breaking, she paid no attention to it. One day, when rubbing the part with her hand to allay the tingling, she noticed a lump, then not larger than half a thimble, but she remarked no great increase in its size till the last time she menstruated, when it suddenly increased in bulk. From that time she never could lie on her left-side, and the relief she had formerly felt from pressing on the swelling, was now no longer experienced; yet her sleep was not much disturbed, nor had her health become seriously impaired. Being uneasy, however, about the increasing size of the tumour, she came to the hospital, and was admitted under Mr. Shaw. For a short time previous to the operation she was ordered mild aperients and lead lotion, from the use of which she derived great relief. The nature of the case, however, being quite clear, the operation was decided upon, and conducted as we have described. She is now so nearly cured that it will not be necessary to give any further particulars of her case.

KING'S COLLEGE HOSPITAL.

BY
HENRY SMITH, Esq., F.R.C.S.,
(Formerly House Surgeon to the Hospital.)
AND
ROBERT C. R. JORDAN, Esq.,
House Physician.

STONE IN THE BLADDER—LITHOTRITY—DEATH.

The case which we shall now relate is one which will be found replete with interest and instruction to the surgeon, as he will find in it an illustration of the uncertainty which must always exist as to the result of any operative interference for the removal of a stone, and the difficulties which may arise in the treatment of a case of this nature. The comparatively modern operation of lithotrity has been resorted to, inasmuch as the proceeding is considered to be much safer, and less formidable, both for the patient to bear, and for the surgeon to execute, than the severe operation of cutting into the bladder. Nevertheless, it is found that serious results will follow the apparently simple and safe method by lithotrity; and, when matters do happen to go wrong after this operation, the sufferings of the patient will be even more acute and prolonged than if the same result should ensue after lithotomy.

The case we are about to detail is as follows:—A stout man, aged 50, was admitted into the hospital in June, with symptoms of stone in the bladder, under which he had suffered for several years; nevertheless, his complaint had not been detected, until Mr. Fergusson examined him, when a calculus was discovered. The stone was probably as large as a walnut, and it was even thought that more than one was present in the bladder. The patient bore the introduction of the sound very well, and there was no irritability of the bladder or urinary passages; there was no reason to expect disease of the kidneys or bladder, and there was no obstruction in the urethra. Under these circumstances, then, Mr. Fergusson determined to attempt to break up the calculus, although it was so large.

On Saturday, June 29th, the patient was placed under the influence of chloroform, and the stone was broken up pretty freely, and without difficulty, as it was not very hard. After the operation the patient was sent to bed, and ordered to keep quite quiet.

During the two days which followed the operation the patient suffered a great deal of pain and irritation from the presence of the fragments. There was excessive irritability of the bladder, with a constant desire for passing water, and a corresponding difficulty. Several fragments of stone came away, but their passage produced great distress. These symptoms were treated by opiates, plenty of diluents, and fomentations externally.

On the fourth day, July 2nd, the condition of this patient was very bad; he was in a high state of constitutional irritation; the pulse was 120, tongue loaded with a thick fur, skin very hot, and a complete failure of appetite; the local irritation was extreme; the fragments had not readily come away, and, when they did pass, they produced intense irritability, causing the patient to rise constantly. At Mr. Fergusson's visit, he was in excessive pain, and could hardly pass any water, and it was evident that a fragment was sticking in the urethra. Mr. Fergusson at once introduced a full-sized catheter, but he found he was unable to get it beyond the bend, as it was stopped by a fragment of stone. This he endeavoured to push back, but he could not. The instrument for the removal of fragments from the urethra was then passed down, and with this he was enabled, after some trouble, to remove the obstructing particles of stone. A catheter was now passed, and a considerable quantity of bloody and highly offensive urine was drawn off. The poor fellow, who had suffered intense agony, was greatly relieved. A large dose of opium was ordered, and hot fomentations, with laudanum, were applied to the lower part of the belly.

3rd.—Much less suffering than was experienced the day before; he is still troubled with a frequent desire of passing water, which comes away with difficulty; only a very few fragments have come away.

At Mr. Fergusson's visit on the 4th he was still suffering under the same symptoms, but in a mitigated form; the fragments in the bladder, and their passage through the

urethra, were evidently producing considerable irritation, but the urine is passed more easily, and the febrile excitement is not so great. As there was no occasion for interference, Mr. Fergusson did not pass any instrument.

This man continued to suffer a great deal at times from the irritability of the urinary organs, and he passed a very small quantity of the stone. On the 7th, a rough fragment of the size of a small bean, was passed through the urethra, but it was accompanied with excessive irritability and pain. He only gets partial relief from the opiates which he takes; he is only able to take fluid nourishment; he does not vomit.

9th.—At Mr. Fergusson's visit this day the patient was suffering still very much from the irritation of the urinary organs, and he had great difficulty in passing his water. There was great constitutional disturbance; pulse, 120; tongue very much furred. Mr. Fergusson passed a catheter down the urethra, but it was stopped by fragments; he therefore used the urethra forceps and brought them away. A catheter was passed afterwards, and the urine drawn off. He then had the patient placed under the influence of chloroform, and passed the lithotrite into the bladder, and broke up more of the stone. The patient was ordered afterwards to be put into a warm bath.

From this time until the 16th the symptoms did not materially change; as much benefit as might have been expected from a further disintegration of the calculus, did not take place. Very few fragments came away, and those with much pain and irritation. His general condition became worse; he lost flesh; pulse very feeble, 120; tongue much loaded; powerful opiates have been given him at night, and by means of these he gets some sleep, but he has been at times delirious. His nourishment has consisted chiefly of fluids, beef tea and milk; latterly he has been ordered some gin and water, which he says diminishes the irritability of his bladder. On the 16th, at his visit, Mr. Fergusson finding that so very few fragments were being passed, introduced the lithotrite, (the patient being put under chloroform,) and attempted to break up the stone still further. He first injected the bladder with some tepid water, but this viscus was so irritable that the fluid was repelled almost directly; however, Mr. Fergusson was enabled to break up several pieces of the stone.

19th.—The patient has had no relief from the last proceeding, but has been suffering more or less ever since, from the continual irritation of the urinary passages, and it is evident that his system is giving way under the constant shocks which it has endured; he is getting very weak; the pulse is very feeble, upwards of 120; tongue very much furred. He has only passed a very few fragments, and these produce great pain and irritation. Moreover, he suffers greatly from irritation of the skin of the serotum and perinæum, and an abscess has formed in the groin, which has been punctured. He takes a large quantity of diluents and opiates. In addition, he takes some brandy.

23rd.—This poor fellow has had scarcely any relief; his sufferings have been very great latterly; he has been passing pus in his urine, and hardly any fragments of the stone have come away; he has gradually been sinking, and died last night.

A *post-mortem* examination was made, and the urinary organs were all removed and examined. The bladder was found to be contracted, and nearly filled up with a quantity of urine mixed with pus, several fragments of stone were found; one of them was nearly as large as a chestnut; it was evident that the stone had been of considerable size, it had not been broken up into very small fragments. The mucous coat of the bladder was very much inflamed, and so was that of the urethra.

On cutting across the left ureter, a large quantity of pus came out, and, on examining this duct, it was found to be distended its whole length to the size of the little finger; its mucous membrane was inflamed, and here and there studded with pus. Both kidneys were diseased; that on the right side was much inflamed, and there were several deposits of pus in its structure; the left was much inflamed, and its pelvis was greatly dilated.

From the symptoms which appeared in forty-eight hours after the operation in this case, it was not difficult to foretell what might, in all probability, be the ultimate result: it was very evident that there was so much excitement of the urinary organs aroused by the operative process, and by the continual presence of rough fragments of stone, that a serious amount of mischief must be produced unless the exciting causes could be removed. This disturbance was not by any means to be expected in this particular instance, inasmuch as there was much less sensitiveness of the parts concerned in the operation than is usually observable in cases of stone in the bladder. In fact, it was this circumstance that induced Mr. Fergusson to attempt the removal of the calculus by crushing, instead of submitting the patient to the more serious operation of lithotomy. The size of the stone was such, that, on first consideration, it appeared that this latter proceeding would be more suitable; for, as a general rule, it may be expected, that, in proportion to the magnitude of the hard and foreign body which is to be crushed, the difficulties and dangers of lithotrity will obtain; nevertheless, the surgeon who has much to do with these cases will every now and then meet with an instance where a stone of considerable magnitude has been successfully broken up, and the bladder completely cleared, after two or three sittings. This, of course, can only happen when everything else is favourable to the progress of the operation, and its successive after-stages. It was in consequence of a remarkably successful case, which had happened to Mr. Fergusson in private only a few weeks before, that he was chiefly induced to resort to lithotrity in the patient who was admitted into the hospital.

In this case, the stone was of considerable size,—in fact, as far as could be ascertained, was of nearly the same dimensions as that in the latter patient. There was also a similar slight amount of irritability in the urinary passages when instruments were passed; and both subjects were of nearly the same conformation and about the same age. Such were the circumstances before the respective operations. In the first case, after the lithotrite had been freely used, there was hardly any irritation, and not a single troublesome symptom beyond a severe rigor; large fragments of the stone were stuck in the urethra, but they produced no uneasiness, and were easily removed; in fact, after only two sittings, a collection of fragments, sufficient to fill a two ounce phial, were passed, and the patient was sent away cured. In the case now under consideration, the result was unfortunately totally different; loss of life ensued, and it was preceded by three weeks of intolerable suffering. It will be seen, on referring to the report, that the most painful accident, and that which was most difficult to avoid, was the impaction of fragments in the urethra, and a consequent inability to pass urine, and an increase in all the bad symptoms. This is an emergency which is very likely to occur after a stone has been broken in pieces, and to prove most painful for the patient to endure, and most troublesome for the surgeon to meet with. The arrest of the fragments in this poor man's urethra were doubtless one of the chief causes of the sufferings he underwent. It is difficult to say whether all the mischief that was found, after death, in the urethra, bladder, and kidneys, was subsequent and entirely dependent upon the operation; but it is probable that it was. The main pathological features were those of intense inflammation; and there is no doubt that three weeks was a sufficient space of time for all these phenomena to be produced. It is most reasonable to conclude, that the operation of lithotrity, which is perhaps looked upon, by those who have seen nothing or little of it, to be a most safe and easy mode of treating stone, had by itself produced the whole of the mischief which had succeeded.

H. S.

The Faculty of Physicians and Surgeons of Glasgow.—Among the Acts which received Her Majesty's sanction during the last session of Parliament was one confirming the charter of this faculty, granted by King James VI. in 1599. The faculty have the privilege of calling before them, and examining all persons practising surgery within the city of Glasgow, and the counties of Lanark, Renfrew, Dumbarton, and Ayr. They have now conceded the right of practice within these bounds to all licentiates of all other legally recognised licensing bodies; moreover, it is no longer necessary for the members, who are henceforth to be styled "Fellows" of the faculty, to become contributors to the "Widows' Fund."

The foundation stone of the new Infirmary at Torquay was recently laid by His Imperial Highness the Prince of Oldenburgh. The Prince gave 50*l.* to the funds of the institution, and upwards of 50*l.* more were afterwards subscribed at the dinner which followed the ceremony.

STUDENTS' NUMBER.

The STUDENTS' NUMBER *for next week will contain a complete view of the Curricula of Study prescribed by the Universities, Colleges of Surgeons, and Apothecaries' Hall; also a List of the different Courses of Lectures which will be delivered at the Medical Schools; together with the hours of attendance at the various Hospitals and Lecture-rooms; and a variety of important information to guide the Student in making his arrangements for the ensuing Session. It will also contain an Editorial Address to Medical Students, whose interests it will be one of the special objects of this Journal, on all occasions, to advocate and protect.*

The extended Circulation of this Number renders it imperatively necessary to go to Press earlier than usual; the Secretaries of learned Societies and public Institutions will therefore be pleased to favour us with their Communications as early as possible, and Advertisers will observe the advantage of availing themselves of this opportunity. The earlier they forward their Advertisements the better;—we cannot promise their insertion after Wednesday next.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 21.

CHOLERA REPORTS.

THE Report of the Board of Health on Cholera, and Dr. Bushnan's Treatise on Cholera and its Cures, demand from us something more than a passing notice. In each work is to be found the discussion of a special point, which, although widely different in each case, is of vital importance to society.

The Report of the Board of Health is occupied almost entirely with such details of the late epidemic as bear upon the opinions they had previously enunciated. The consequences of over-crowding, bad ventilation, defective drainage, and the like, receive here new illustrations, and are depicted by weightier examples. The warnings which were uttered, and the advice which was tendered before the epidemic, are now shown to have been in all points warranted, by the subsequent experience of a pestilence unexampled in recent history for the extent and range of its destructive powers. But it is not to the accuracy of the opinions of the Sanitary Commissioners, or to the views of those who brought before them the facts which guided them, that we now desire to refer; it is to the astonishing circumstance, that these reiterated and urgent appeals to the common sense and common prudence of the country met with no response. The Report before us bears damning evidence of the neglect with which the injunctions of the Board were received by civic Dogberries and parish Bumbles. A single town in all England—Sheffield—stands in honourable contrast to the indefensible negligence which, in all other cases, permitted the assailant to enter the city before the garrison was aroused and the defences manned. We need hardly recal the almost obloquy with which the exertions of the Board were repaid in London; the outcry against their most necessary measure of closing the grave-yards; the opposition to the house-to-house visitation; the gratification with which the so-called guardians of the poor found that the Health Act was powerless, and the Nuisances Prevention Act almost inefficient. We need merely allude to the impediments which were thrown in the way of Mr. Simon, when, single-handed, he attempted to stem the torrent of disease which burst over our devoted city; and when, with singular hope in the materials with which he had to deal, he endeavoured to make aldermen and common-councilmen understand the duty they owed to their neighbour, and their obligation to follow the dictates of superior knowledge. Only a few weeks ago we saw, in an electioneering address which issued from the vestry of Marylebone, an appeal for support from the ratepayers, founded, in part, on the express ground that *they had resisted the orders of the Board of Health!* as if this incomparable confession, which placed them in the position of men who scorned the science of their age, evaded the laws of their rulers, neglected their duty to their country, and became thus participants and agents in the events which were to destroy the lives and happiness of their fellow-creatures, was to be a matter for public boasting, and a means of gaining votes to sustain them in the discharge of responsible offices!

But, after all, the Government of the country is more to blame than its citizens. In matters of physical science the Legislature must lead, and not wait to follow. If it be a duty of Government to adopt the best means for preventing epidemic diseases, then the employment of these means should be rendered incumbent on all persons. It is useless to wait till the knowledge necessary for conviction has penetrated the popular mind. It is still more useless to act as our Government has done; to recognise the truth of science by a public enactment, and yet, as if distrustful of their own opinions, to render that enactment worthless by not daring to grant in it efficient powers. Had Government acted as it should have acted, the select vestry of Marylebone had never dared to claim the suffrages of their constituents because they had resisted the Board of Health! A Bow-street magistrate had never been able to prolong a most odious nuisance, by discovering that the Act warranted him to take no steps to enforce obedience to the orders of the Board. In a word, the Board of Health would never have written, at the close of this fatal period, that "as far as the local authorities were concerned, to all intents and purposes, no one fact of sanitary science need ever have been ascertained."

Let us hope, at any rate, that the Government will now feel convinced that the time has passed in which any concession should be made to popular clamour, or any deference be shown to popular ignorance. Let us trust that the new facts now reported by the Board will convince them, that there is no course left to them but unhesitatingly and fearlessly to urge forward the preventive measures which were thwarted or disregarded in the last epidemic, but which may be rendered necessary at any moment by a renewed outbreak of this fatal plague.

The other publication to which we have referred opens up a question of very great importance. In this work we have the deliberate expression of a well-known writer, that the mortality of cholera might, by a certain treatment, be reduced to a standard which would render cholera a disease less formidable than typhus fever. Now, whether or not this opinion be correct, it cannot be denied that, backed as it is by evidence which appears trustworthy, it demands attentive consideration both from the Government and the Profession.

Is there any reason why we should reject, as fallacious, the records of the Coldbath-fields prison? What extent of truth is expressed by these figures, which have been so much canvassed and disputed? What evidence can the last epidemic afford us on this point? Whatever may be the answer to these questions, there can be no doubt that science and humanity alike demand that the subject should be thoroughly sifted, and that, if we are to condemn the

sanguine opinions of Dr. Stevens and Dr. Bushnan, this condemnation should at least be based on facts as numerous and as weighty as those which have been brought forward to prove the merits of the saline treatment.

METROPOLITAN INTERMENTS ACT.

A month has now elapsed since this measure became a part of the law of the land. Its sanitary effect is all with which we have to do; and so far as this is concerned, there has been nothing done during the progress of the Bill through Parliament to remove the objections which we stated when we made our first remarks on its provisions. We, however, repeat, that we are willing to accept it as an instalment of what is due to the public. We had never any fear of the opposition to the Bill being successful. The motives of its opponents were too transparent to deceive any one. The abominations committed in the metropolitan grave-yards and charnel-houses had been detailed and commented on at public meetings and by the public Press, *usque ad nauseam*, and even the Smithfield-loving common-councilmen must have been ready to exclaim:—

"Oh! the offence is rank, it smells to Heaven."

The framers of the Bill took for its preamble a mere truism. There were, indeed, found some persons with a sufficient command of countenance to declare gravely that it was *not* "expedient to make better provision for the interment of the dead in and near the metropolis;" but they belonged to that class which shudders at the mention of railroads and steamboats, and considers the electric telegraph to be little better than impious. The representatives of the Metropolitan boroughs, who belong to a very different class, must have been sorely distressed when they found themselves constrained to become the mouth-pieces of complaining churchwardens and uncomfortable undertakers. But all this is now over, and it remains to be seen how the members of the "General Board of Health" will discharge the duties imposed upon them by the Legislature. As there has been so much misrepresentation, and some misconception of the powers given or taken away by the Act, it may be worth while to take a cursory view of what it really does enable its executants to do or to undo. We will take the compulsory enactments first. The first of these makes it incumbent on the Board to provide from time to time in such places as, having regard to the public health, may appear to them expedient, "burial-grounds of sufficient extent for the decent interment of the bodies of all persons" dying within the district specified in the first schedule to the Act, comprising all the Metropolitan parishes and some others. Having found burial-grounds and built chapels, and having procured certain portions of ground to be consecrated, the Board are to provide chaplains to officiate in them. All due tenderness is, however, shown for the consciences of those persons who object to lay their relatives in consecrated ground, and every facility is given for fencing off separate resting places for those sects who wish to carry their exclusiveness beyond the grave. Provision is properly made for insuring to the parishioners of any part of the district, in which interment shall have been interdicted, the same rights of sepulture in the new ground that they had in the parochial burial-place; and the right of the incumbent of the parish to perform the burial-service is also saved. The Board are to keep the burial-grounds in order, and to fix a scale of fees for interments, and they are not to permit any grave to be dug within 200 yards of a dwelling-house. All fees are to be paid into the Bank of England; and the Treasurer of the Board, and all other officers intrusted with money, are to give security for duly accounting. Cheques are to be signed by the Treasurer, and counter-signed by two members of the Board, and all the expenses of carrying out the provisions of the Act are to be paid out of the fees which the Board are empowered to exact; the contingency of these being at any time insufficient being provided for by a power to levy a rate, not exceeding a penny in the pound, according to the valuation acted upon in assessing the county rate. Full and correct accounts are to be kept, and are to be open for the inspection of ratepayers and mortgagees; and an annual report of all the proceedings of the Board is to be laid before Parliament. The only other compulsory clauses either have reference to the compensation of parties whose vested interests are interfered with, or provide for the protection of mortgagees and ratepayers. The clause upon which the success or failure of the Act as a Sanitary measure mainly depends is, unfortunately, (perhaps necessarily,) not wholly compulsory. When the Board shall be of opinion that interment in any part of the district should be discontinued, they are so to report to Her Majesty; but they may be as long as they please in forming their opinion, and when their report is made it is not to be taken into consideration by the Privy Council until the public have had a month's notice; so that those persons who think that things ought to go on exactly as they did in the days of their grandfathers may have an opportunity of doing what they can to oppose the issue of the order, which is finally to close the burial-places to which the report has reference. It is to be hoped that the Board are now preparing the report which may lead to the closing of some of the most offensive grave-yards. We shall keep an eye on their proceedings, and shall do all in our power to secure the efficient working of the Act. We reserve the review of the merely permissive clauses until a future occasion.

MEMOIR OF JOHN GREEN CROSSE, F.R.S.

PART II.

In September, 1833, Mr. Crosse accidentally saw in the papers, that the subject for the Jacksonian Prize for that year, was the "Formation, Constituents, and Extraction of the Urinary Calculus." With his usual promptitude of decision, he at once made up his mind to compete for this, but was unavoidably prevented commencing the literary portion of the treatise until the end of October; as the Essay was to be sent in before Christmas-day, there were barely two months for its completion,—a short time under any circumstances, but still further curtailed by the continual interruptions inseparable from an extensive practice. His task was accomplished in spite of these difficulties, and, as is well known, obtained the prize. The Essay was subsequently published, and at once took rank as a valuable contribution to medical literature. It is divided into twelve chapters, with three copious appendices, and is illustrated by a great number of coloured plates, principally taken from calculi and preparations in Mr. Crosse's own museum. The value of the work is greatly enhanced by its containing a catalogue of writings on the subject of urinary affections so copious that we scarcely know its equal: it had its origin in some memoranda, drawn out many years before by Mr. Crosse, for a systematic course of reading, and does infinite credit to his research.

The first six chapters of the treatise are devoted to the causes, composition, growth, and pathological effects of calculi in the various parts of the urinary organs. In the remaining six, the operative part of the subject is considered.

In performing lithotomy, Mr. Crosse generally used a straight staff, and made the opening into the bladder with

the common scalpel, preferring it to the more rounded scalpel of Aston Key; the cutting gorget he rejected *in toto*, but advised the blunt gorget when a curved staff was employed. It was thus that the late Mr. Dalrymple and the late Mr. Martineau operated, and thus that thirty-eight patients, operated on in succession by Mr. Dalrymple, Mr. Norgate, and Mr. Crosse, *all* recovered! The following were the rules strongly laid down by Mr. Crosse:—Make the deep incision through the prostate and neck of the bladder of moderate extent, so that the forceps may readily enter; dilate a little with the finger and forceps before grasping the stone; act slowly in the extraction, that the wound may further dilate; and enlarge the wound if there is great resistance: "thus," says he, "you will have the best chance of accomplishing a safe, though you may fail to have a rapid and brilliant operation; gentleness and precision ought rather to be studied than great expedition; at any rate, whether the operator cut much or little, let him not use the forceps boisterously, but temperately and with gentleness, for violence, if it do not produce immediate laceration of soft parts, will be sure to bring on subsequent inflammation, tumefaction, and sloughing." The effect of the publication of this Essay was a great increase of reputation to the author, not only in his own country, but abroad; and the University of Heidelberg showed their appreciation of his labours by conferring upon him the degree of M.D. In 1836, Mr. Crosse was elected a Fellow of the Royal Society, having so early as 1820 been admitted into the Royal Medical and Chirurgical Society of London. In 1845, the University of St. Andrews conferred on him the degree of M.D., which, however, he regarded as only honorary, and did not make use of. We have not by us a complete list of the learned foreign societies of which he was member, but they were very numerous.

In 1839, Dr. Gibson, Professor of Surgery in the University of Pennsylvania, visited England, and on his return to America published an account of the "notables" whom he had met in his travels. It is very amusing, and not less so from some of the descriptions being laughably overdrawn. For instance, those who knew Dr. Buckland ten years ago, would hardly have supposed that he sat for the following portrait by Dr. Gibson:—

"Dr. Buckland is so very muscular, so well put together in all his bones and joints, so braced and supported by tendons and ligaments, so broad-shouldered and brawny in all his limbs, and quick and springy in all his actions, as to be easily mistaken for a member of some more hardy or laborious profession; so much so, that if I had seen such a man in by-gone days,—in the days of the Cribbs and the Jacksons, and the Gregsons and of George the brewer, I should have said at once he belonged to the fraternity!"

Still, allowing for a little transatlantic colouring, the descriptions are vivid and full of spirit. Norwich was visited by the Doctor, and his description of that town, with his interviews with Mr. Crosse, is not the least entertaining part; We therefore extract it with much pleasure:—

"Early next morning, (says the Doctor,) I repaired to the house of Mr. Crosse, and fortunately found him at home, though about to make a long visit to the country, which, however, he obligingly postponed, for the purpose, as he kindly remarked, of devoting himself entirely to my concerns. After breakfast, he took me into his cabinet, occupying a part of his large and commodious mansion, and pointed out every preparation of interest belonging to it, exhibiting and explaining, in particular, each specimen from which drawings had been made to illustrate his large, splendid, and very valuable work on *calculus;* then to his library, a lofty, capacious room, filled with a choice collection of medical and miscellaneous works in almost every language, amounting to several thousand volumes; among the rest, numerous American publications, rarely met with in European libraries, especially medical journals, of which he spoke highly, giving a decided preference, however, to that of the *Medical Sciences of Philadelphia*, edited so long and so ably by Dr. Hays, saying it was quite equal, if not superior, to any similar European work; showed me the Lexicon of Collisen, of Copenhagen, in twenty-five volumes, commenced in 1830, and brought down to 1837, giving a brief account of every medical work in every language—a most extraordinary production, not less wonderful for its accuracy than the immense research displayed by the author, who, it appears, has abandoned all other pursuits, devoted himself exclusively to this undertaking, and depends for subsistence upon its proceeds. After remaining some hours engaged in close examination of all the interesting objects by which Mr. Crosse is surrounded, rendering his whole establishment a complete *thesaurus*, he was kind enough to walk with me to the house of his venerable friend Mr. Dalrymple, long known as one of the most eminent provincial surgeons in England. . . . While passing through the hospital with Mr. Crosse—who prescribed for twenty-five or thirty patients, besides performing in the wards several minor operations, among the rest that of Fricke, of Hamburg, for varicose veins—I had the opportunity of examining a very curious and interesting case of extraordinary enlargement of the tongue in a little girl six or eight years of age, the bulk of the tumour having been, before the commencement of the treatment by Mr. Crosse, so considerable, as not only to fill the mouth—its circumference being more than six inches—and oblige the child to breathe by the nostrils, but to project four inches beyond the teeth; yet, by graduated pressure, through the medium of a machine surrounding the head, to which a screw was attached, in a direction perpendicular to the temple on each side, the tongue was so reduced in the course of a few weeks as to be retained within its proper walls, so that the child, at the time I saw her, may be said to have been nearly well. With casts in plaster of the different stages of growth and corresponding reduction, Mr. Crosse was kind enough to favour me. I mention this case particularly, because, in several instances in Europe and this country, the tongue has been extirpated very unnecessarily, where it might, there is reason to believe, have been cured by this simple and very efficient plan, first advised by Lassus; and, although not generally adopted, must unquestionably, after the success of Mr. Crosse becomes known, do away with every other mode of proceeding. . . . . From the Asylum, our ride was extended to the country-seat of Mr. Crosse, containing ninety acres, beautifully situated on a commanding eminence two miles from Norwich, overlooking the Yarmouth river and adjacent country for miles, reminding me strongly of the Schuylkill and its beautiful meadows, as seen from the Woodlands. . . . . 'And is this all,' some may possibly exclaim, 'we are to hear of Mr. Crosse? Is *he* not deserving of a sketch? Are we not to know how he looks, whether he is large or small, fat or lean?' Truly, I may reply, he is neither one nor t'other, but between the two—with as fine features, as laughing black eyes, as pearl-white teeth, as smooth, well-turned figure, as much spring and activity in step, and as well dressed as most gentlemen of forty-nine in the British realm; withal, as occasion may require, lively, playful, joyous,—composed, steady, quiet, thoughtful in the extreme; and, if to these we add fine education, uncommon sagacity, extensive, varied general and professional information, undoubted practical skill, and as kind a heart as ever beat in a human breast, what more can be desired? Especially as, through his 'good works,' he has long been known all over the world."

The late Mr. Martineau, of Norwich, was one of the most successful lithotomists that ever lived, and the description given by Mr. Crosse of his mode of proceeding is highly instructive. In a short paper, published in the "Medico-Chirurgical Transactions," dated January, 1821, Mr. Martineau gives a list of eighty-four patients operated on successfully, with only two exceptions! Well might a man be proud of such achievements; but, by a most singular coincidence, the next two patients operated on by him in public *both died*. Mr. Crosse saw him operate about fifty times, and speaks, therefore, (he says,) with some grounds for confidence.

Mr. Martineau most carefully selected his patients, rejecting such as were very unhealthy, or suffering from enlarged prostate. This judicious selection cannot fail to have exercised an important influence on the result of the cases, for no man will lithotomise with great success who accepts patients in all conditions and stages of disease; Mr. Martineau was, besides, gifted with great firmness, steadiness, and manual dexterity, and cut down to the staff with so bold a stroke, as to enter its groove by a second, or at most a third incision; with equal quickness and precision he laid open the membranous portion of the urethra, and divided a part of the prostate gland, but never cut through the whole of that body. The staff withdrawn, he introduced his left forefinger, which was particularly long and large, into the bladder, forcibly dilating the opening, and using the finger as a powerful but safe instrument for dilating the opening to admit the forceps, and this Mr. Crosse regarded as a peculiar and intrinsic part of Mr. Martineau's method of operating. The opening into the bladder being thus effected, partly by cutting, partly by dilating, the forceps entered readily; and in the use of these, rapidly carrying them to different parts of the bladder if required, or more frequently seizing the stone at once, Mr. Martineau possessed a degree of freedom and dexterity unparalleled within the sphere of Mr. Crosse's observation, and certainly possessed by *very* few.

It was in meeting the difficulties of a surgical case that the superior judgment and tact of Mr. Crosse appeared to advantage; and of this the following case presents an example:—Whilst lithotomising a man, he carried the scalpel on so as to divide the prostate and neck of the bladder; one superficial artery started, on which a ligature was placed, and the operation was concluded satisfactorily. Mr. Crosse remained with the patient nearly an hour, but, just as he was leaving, profuse hæmorrhage burst out from the deepest part of the wound; this continued for three hours, in spite of plugging and all other measures, and the patient having then fallen into a state of collapse, Mr. Crosse opened the wound freely, cleared the bladder of coagula with his finger, and then, by means of a very curved needle, ligatured the internal pudic artery where it lies on the inner surface of the ramus of the ischium and pubes. The bleeding instantly stopped, and the patient did well.

Towards his professional brethren the conduct of Mr. Crosse was always most straightforward and manly; and it was as much from confidence in this, as from appreciation of his skill, that his services were on many occasions called into requisition by others when in situations of embarrassment and difficulty. Of this some curious examples are on record. A surgeon, (since dead,) between whom and Mr. Crosse feelings the contrary to friendly, existed, undertook to remove a tumour from the neck; uncontrollable hæmorrhage came on, and in this emergency an urgent request was sent to Mr. Crosse for his assistance. Banishing from his mind all hostility, he thought only of assisting the perplexed operator, and speedily succeeded in arresting the flow of blood.

On another occasion, a surgeon at some distance from Norwich undertook lithotomy, but was utterly unable to extract the stone. Every expedient was tried without success, and at length, in despair, Mr. Crosse was summoned, although twenty miles away. The patient and surgeon awaited his arrival in no very enviable state of mind, but at length he came, extracted the stone, gave encouragement to the patient, and saved the credit of the operator.

Mr. Crosse was an earnest supporter of the Provincial Medical and Surgical Association from its earliest commencement, and was President in 1846. At the fourth anniversary meeting, held at Manchester, in July, 1836, the "Retrospective Address was delivered by him, and to its "Transactions" he communicated several papers, "A Memoir on the Method of securely closing Moist Anatomical Preparations," a most elaborate and valuable treatise on "Inversio Uteri," profusely illustrated with plates and diagrams, and "A Remarkable Case of Inverted Displacement of the Urinary Bladder," in Vol. XIV. This case is so remarkable, that the account given by Mr. Crosse has, he says, "been received by some, even by those possessed of great experience, with startling incredulity." The outline of this extraordinary case is as follows:—In 1829 a colleague of Mr. Crosse's received under his care a female child, aged between two and three years, on account of a florid red strawberry-like tumour, about the size and shape of a walnut, projecting at the external labia pudendi. The surgeon supposed it was a vascular tumour, which might be removed by ligature; but, before proceeding to operate, he requested Mr. Crosse to see it. Mr. Crosse expressed doubts as to its being a vascular tumour, but was uncertain as to its precise nature until a second more careful examination a few days afterwards, on his casually coming to the bedside just as the surgeon was about to apply a ligature round the neck of the tumour. He then satisfied himself that the tumour was the urinary bladder in its entire thickness, prolapsed through the dilated urethra, and turned inside out! On pressing the tumour firmly it was found to yield and pass gradually behind the symphysis pubis, where, with a little judicious management, it remained in its proper position. Mr. Crosse subsequently ascertained, after an interval of sixteen years, that the patient grew to be a healthy young woman, and that she had never had any relapse of the vesical displacement, although much troubled with incontinence of urine.

Mr. Crosse was curious in caligraphy, and an example of this fancy now lies before us. It is a list of animals he wished to dissect, and was given by him to Dr. Rigby full thirty-four years ago. It is quite a curiosity in its way, for each name is written in a hand characteristic of the creature specified. *A long viper* has a stiff venomous look; *a large owl* palpably blinks before us; *a small wren* flutters in Lilliputian characters; the letters of *a long-eared bat* are exceedingly auricular; whilst *a jackdaw* has all the pertness of the bird itself; *a skylark* quavers in flourishing court hand; but *a broad-tailed squirrel* is honoured with large print; *a hawk* claims a legal hand (from some fancied resemblance, perhaps, between predatory birds and John Doe); whilst the list is closed with *a large snake*, which rolls across the page in all the dignity of the best developed round-hand.

Nothing could better portray the estimation in which his talents were held than the eagerness exhibited by gentlemen, even in distant parts of the country, to place their sons with him as pupils. On the aggregate he had nearly forty articled pupils, there being generally three or four resident in the house; and the eminence attained by many of these—as, for example, Dr. Copeman, of Norwich; Mr. James Reid, of Canterbury; and Mr. George Murray Humphry, of Cambridge—is not less honourable to them than creditable to their instructor; but he seems to have possessed the happy art of imbuing others with the same energy and the same love of the profession which characterised himself; and it was impossible for any but the very idlest to be with him long, without imbibing some of his industry and professional zeal.

We now approach the most painful portion of our task, the close of a truly useful life. About two years ago Mr. Crosse had undergone great anxiety and mental distress, and this was followed by symptoms of failing health. By-and-by he began to feel himself unequal to the discharge of his professional duties, the wear and tear being too much for him. He, therefore, in compliance with the urgent solicitations of his friends, determined to take some relaxation, and to visit London for the opinion of Sir Benjamin Brodie and Dr. Watson. He was absent from Norwich seven weeks, and returned somewhat improved in health; but it could not be concealed from those who had witnessed his former activity and acuteness, that he was no longer the same man. It was, therefore, with profound regret, but without surprise, that they beheld his gradual but progressive decay. His last short illness was marked by no acute or extreme suffering. The day fortnight preceding, he had seen four of his patients for the last time. From that day he declined; his breathing became short and difficult, with increasing languor and weakness. Occasionally there seemed a little revival, but it was a lighting up of that which was soon to be extinguished for ever. On the night of Saturday, June 8, he became evidently worse; but his intellect was clear, his mind calm and happy. The next morning he fell into a tranquil sleep, and from that sleep he passed into eternity.

He died in the sixtieth year of his age, and thirty-fifth of his residence in Norwich.

A *post-mortem* examination proved that the seat of mischief lay in the brain, every vessel of which was more or less ossified.

Every possible honour was paid to his remains by his townsmen. They were followed to the grave by the majority of the medical profession at Norwich, and the dean and other dignitaries met the procession at the cathedral door. Whilst the coffin was carried down the great aisle the noble organ pealed forth the "Dead March in Saul," and as the body was lowered into the grave, a sublime anthem was chaunted by the choir.

The best testimony that can be offered of the respect in which Mr. Crosse was held, is the general regret expressed for his death. The local press vied with each other in eulogiums upon him, and it was universally felt, that in his death Norwich had sustained the loss of one of her ablest and most distinguished citizens. We had prepared some further observations upon Mr. Crosse, but Mr. George Murray Humphry, of Cambridge, has kindly supplied us with such an able exposition of his character, that we gladly substitute his remarks for our own.

The most striking feature in Mr. Crosse's character was his intense and untiring energy. This existed in him to a greater degree than in any other person I have ever known, and contributed not a little to the well-deserved professional reputation he had earned. It showed itself in everything he undertook, and was pre-eminently displayed in the incessant zeal with which he prosecuted his professional studies and duties. I resided in his house for three years when he was in the prime of his physical and intellectual vigour, and it is no exaggeration to say that he was never idle. Early in the morning and late at night he was in his study, where his time was not spent in dilettanti pursuits, or in discursive, easy reading, but in real hard work, always

directed to some definite object. He had a good knowledge of the French, German, and Italian languages, and was conversant with the best writings on surgery in those countries. He prided himself on being acquainted with the latest views and improvements originated in all parts of the globe, and his reading in our department of the profession was probably as extensive as that of any English surgeon of the day, if not more so. His assiduity in collecting information, examining references, and searching into the details of any particular subject that occupied his attention, was surprising. He would spare no pains to perfect his knowledge, would open a correspondence with all the eminent surgeons, would ransack every library, and investigate every museum within reach. Of this his published writings are a sufficient evidence, and his private manuscripts furnish more ample proof. Whatever he undertook he pursued with ardour and unremitting perseverance, throwing himself wholly into it. Having great reliance on his own maturely formed opinion, he was not easily diverted from his purpose, and was only excited to increased efforts by the obstacles that occurred to thwart him.

This excessive energy and perseverance was united with a universal acuteness of observation, much power of suddenly concentrating his thoughts upon a given subject, and great rapidity in drawing his inferences; a rare combination of opposite qualities which could not fail to render him eminent as a surgeon. Indeed, we seldom see united in one person so many requisites for the successful practice of our profession. Though generally quick in his diagnosis, Mr. Crosse would make a patient investigation of the particulars of a case when difficulties arose, and was capable of reflecting calmly and arguing clearly upon them. He was particularly decided in his opinion, and very ready in action, "always going," as he said of another surgeon, "*by the shortest cut* to his purpose." He was a skilful and successful operator, possessing much dexterity, a hand that never faltered, and an assurance that no casualty could shake. Several times have I seen him in very trying positions, but never was there evinced the slightest diminution of that coolness and steadiness which nature and sound knowledge had conferred upon him. Though bold and expeditious in the use of the knife when it was required, he was by no means an unsparing advocate for it, more particularly when it was to be employed for the purposes of mutilation. He would ply the knife freely to save, but was most unwilling to employ it to remove a limb. In the general treatment of his patients, the remedies employed were few and simple; in common with all other successful practitioners, he rigidly enforced care in diet. He gave very great attention to the minutiæ of surgical treatment, paying regard to those points which many persons are apt to think beneath their notice. He was most careful in the application of splints and bandages; often have I known him spend hours at a visit in the accident ward of the hospital. In his operations, also, he was excessively nice about all the minor details. Every little point likely to promote the comfort of the patient, or the facility of the procedure, caught his eye, and received his attention. On these, as on most other occasions, nothing escaped him; and those who neglected such little matters were sure to incur his rebuke. On one occasion he gained the highest commendation from a very particular maiden lady, by bleeding her in her drawing-room without soiling the carpet or furniture with a single drop of blood.

His two great characteristics—assiduity in acquiring, and acuteness of observation—showed themselves in a great variety of ways. He had gradually formed a very extensive library, and by great labour had collected and preserved sufficient specimens to constitute a rich and valuable pathological museum. He lost no opportunity of adding to these, his favourite stores. When a pupil, the money assigned to defray his personal expenses was laid out in books so unsparingly, that he scarcely allowed himself the ordinary necessaries of life, and any treasure on a bookseller's stall was sure to be seen and deposited on his shelves. Every surgeon in Norfolk, and the neighbouring counties, will bear testimony to the statement, that he never omitted a chance of improving his knowledge in pathology, or of increasing his museum. He could always find time to attend a *post-mortem* examination, often riding many miles for the purpose. Never was he more cheerful than when engaged with his pupils in dissecting and preparing specimens, or in describing the preparations in his collection. He was a sharp scrutinizing observer of character, and could appreciate well the real value that should be attached to the symptoms detailed by his patients.

Much as we may admire these qualities, which he possessed in so large a measure that they could not fail to lead to eminence and success in any line of life which it might have been his lot to follow, and which were peculiarly adapted to the one he selected, it is with still greater pleasure that I can bear the most sincere testimony to the high moral feeling which guided his actions. This was particularly manifest in his professional conduct. No man could practise in a more honourable, straightforward manner. He would never pander to the fancies of his patients for the purpose of promoting his own interests. He had the most perfect abhorrence of any approach to quackery, deceit, or humbug. Relying with confidence on his real merits and integrity, he scorned the attempt to ingratiate himself by any of the accessaries of mannerism or display too commonly resorted to by surgeons, who, though upright men, are less scrupulously sensitive upon such points. Indeed, Mr. Crosse carried this feeling so far that he often scarcely did himself justice; sometimes he even gave offence. It was, no doubt, from a feeling of the same kind that he did not take even the legitimate means to ensure himself against misrepresentation, and, on this account, was occasionally the subject of very undeserved imputation as to his motives. Moreover, he was most careful of the reputation of his professional brethren. He strongly felt the great responsibility which attached to him in this respect as an hospital surgeon, and as the referee in cases of difficulty. To the medical man himself he would not scruple to express his opinion decidedly, frankly, sometimes a little sharply; but I never remember to have heard him speak disparagingly of a fellow surgeon in his absence. Those who knew Mr. Crosse best will most unreservedly acquiesce in the statement here made; but who is so capable of judging the master correctly upon these points as the pupil?

Added to the intense earnestness of his character, there was a vivacity of manner and a joyousness of spirit, which evinced themselves most especially in the preservation of knowledge, which attached his pupils at once to himself and to their studies, and rendered him one of the very best of teachers. He was ever ready to impart information, and he did so in that clear concise style which marked all he said and all he wrote, and which was so conspicuous in his private correspondence no less than in his professional writings. He used to superintend his pupils in their reading, to examine them regularly, and to direct them in taking cases. The more important cases, both in public and private practice, he wrote out himself. He gave the pupils the opportunity of reading these notes, communicated his views to them, and united them with him in the search for further information. Thus yoked, as it were, with him, they could not fail to derive some impetus from his zeal. Cold and phlegmatic, indeed, must have been the student who was not fired with love for his profession by contact with such a man.

Though he never took any active part in political matters, Mr. Crosse was an attentive and admiring observer of the progress of intellectual and social improvement. No man could take more delight in watching the advancing tide of general science, more particularly in its application to the arts and the conveniences of life. He rejoiced to have lived in the days of railways and the penny post, and used to say, that a nation must be great which enjoyed two such advantages. He felt strongly the evils attendant upon the isolated position in which the great majority of the members of our profession are placed; and exerted himself to the utmost to promote more free intercourse and harmony among them. It was with this view that he laboured successfully to establish the Norfolk and Norwich Book-club, the Pathological Society, and the Eastern branch of the Provincial Medical and Surgical Association. To the Association he was particularly attached, and laboured very hard in its service. Perhaps his indomitable energy and perseverance were never more fully displayed than in the anxious and difficult task of organising and upholding that great body. He continued to be the secretary of the Eastern branch till his death; he would strain every nerve and make great sacrifices to attend the general as well as the local meetings. We may say that the crowning act of his public life was his officiating as President of the Association, in 1846, when the general meeting was held at Norwich. All who assembled there will remember the able and spirited manner in which he conducted the proceedings, the terse-

ness of his remarks, his restlessness under anything like prolixity of detail, and the warm zeal he manifested for the advancement of medical science. The concluding motto of his stirring address upon that occasion was the motto of his life—

"Fugit irrevocabile tempus."

On the next occasion of my seeing Mr. Crosse, at the meeting of the Suffolk branch of the Association at Bury St. Edmunds, in June, 1848, it was too evident that a great change had commenced in him; the same active mind was there, but the physical frame had begun to show the destructive effects of the incessant wear to which it had been subjected. From that time we began to hear of his decline; and when he came to Cambridge, in August last, on his way to London, there was an unwonted composure and tranquillity, which seemed to tell that he had begun to enter into his rest. Still the old fire burned out, and he must needs go to the hospital to see a case of popliteal aneurism under treatment by pressure. He was very weak, but there was no evidence of any great amount of real disease; and, after a respite of a few weeks, he was able in some degree to resume his duties at Norwich; but the time was short ere he sank into his last illness. Now that active spirit is gone where no mortal coil will clog its yearnings after usefulness,—the golden bowl is broken, but the gems it contained are not altogether scattered to the winds; for he has left an enduring treasure in his writings, and a brilliant, in his example!

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Report of the General Board of Health on the Epidemic Cholera of 1848 *and* 1849. (Presented to both Houses of Parliament by command of Her Majesty.) Pp. 139.

Cholera and its Cures; a Historical Sketch. By J. Stevenson Bushnan, M.D., &c. Pp. 169.

It would have been a great disappointment if the recent epidemic of cholera had not produced some scientific results of importance, and it will be still a disappointment if more results are not forthcoming. A host of memoirs, both in English and foreign periodicals, have examined various points of this great question, and, in addition, we are led to expect that some of the public bodies in this country are preparing more comprehensive publications. The two works quoted above are the most important which have lately appeared, and, although very different in purpose and scope, it may not be unadvisable to place them together.

The Report of the Board of Health is made up of the Report itself which emanates from the Board, and of two appendices from Mr. Grainger and Dr. Sutherland, the superintending inspectors. We shall hereafter review the appendices; at present we confine ourselves to the Report. It commences with a brief abstract of the progress of cholera since 1845. As a portion of this account is compiled from the letters of the English consuls to the Foreign-office it may be presumed to be peculiarly accurate. It is not, however, very minute, and is, indeed, rather a summary than a detailed history of the progress. The Board, after referring to the isolated cases which occurred in London and other parts of the United Kingdom in the summer of 1848, refer the commencement of the general epidemic attack to the outbreak in Edinburgh in the beginning of October. The number of deaths in England and Wales during 1849, is quoted from the Registrar-General as 52,293, and in addition there were 18,887 fatal cases of diarrhœa. This mortality is probably greater than that of 1832. Comparing the mortality of London with that of the epidemic of 1832, it appears, that in 1832 one person died in every 250, while in 1849 one person died in every 151; and, after correction for increase of population, 5,800 more persons would have died in 1832 had the epidemic then been as severe as that we have just passed through.(a) But the returns, even for London, in 1832 were so inaccurate that hardly any parallel can be drawn.

After alluding to these and other matters of historical interest, and after touching on the subject of contagion, the Report proceeds to the consideration of what may be deemed the special province of the Board of Health, viz., the influence of external circumstances on the diffusion and intensity of cholera. Much valuable and instructive information is given respecting the effects of overcrowding, (p. 35,) filth, (p. 38,) dampness, (p. 47,) want of drainage or imperfect drainage, (p. 51,) gravcyards, (p. 54,) unwholesome water, (p. 55,) improper food, (p. 59,) &c. The most striking examples of these conditions appear to have been selected from the reports of the respective inspectors; but it is not attempted to give anything like a complete sanitary history (so to speak) of cholera. Indeed, it is probable that the Board had not machinery of sufficient extent and precision to enable them to collect the materials for such a history. The Report then goes on to enumerate some instances of exemption from attack, and traces the causes which seemed to account for this. The following extract from the evidence of Dr. Duncan, of Liverpool, is worthy of attention:—

"In 1847, Lace-street, one of the most unhealthy streets in Liverpool, was undrained. In that year there occurred in the street 200 deaths from fever, and 250 more from other causes. In 1848 it was sewered. During the epidemic of the following year (1849), the deaths from cholera were only 36.

"In a certain number of registered lodging-houses, the history of which has been traced, there occurred annually, *before* registration, which involves supervision, prevention of overcrowding, and attention to cleanliness, 150 cases of fever. During the late epidemic, there occurred in these houses only 98 cases of cholera; while the total cholera cases in the town were, to the fever cases of the preceding years referred to, as 2 to 1; so that cholera, *after* registration, was only in the proportion of 1 to 3 as compared with fever *before* registration.

"In a certain district at the period of the fever of 1847, the cellar population amounted to 12 per cent. of the entire population. At that time the fever carried off upwards of 500 of the inhabitants. During the late epidemic, the inhabitants of cellars in this district, having been reduced to less than 2 per cent. of the population, the deaths from cholera were only 94, or in the proportion of less than 1 to 5 of the former mortality from fever."—P. 69.

After adverting to those various influences, the report proceeds to detail the preventive measures which were recommended in 1848, before the epidemic, to the Boards of Guardians. As we need hardly remark, these recommendations were disregarded or neglected almost entirely in the metropolis, and in many provincial districts. The powers of the Board were found to be insufficient; and, although they had indicated with extreme care the necessary precautionary measures, the advice was flung to the winds, and in the majority of cases the cholera appeared before any steps whatever had been taken to limit its ravages.

Passing from these topics, the report next adverts to the measures adopted when cholera had actually appeared in a place,—external and internal cleansing; the arrest of diarrhœa by house-to-house visitation; the opening of houses of refuge for those who lived in infected localities; and, in a few instances, the formation of cholera hospitals, were the means chiefly employed. The results of the house-to-house visitation are stated to have been most satisfactory, and a certain number of figures are brought forward in support of the assertion. While we are fully convinced of the importance of arresting premonitory diarrhœa, we cannot agree with the Board in accepting the loose statements of the inspectors of the number of cases of choleraic diarrhœa, and the proportion of these that passed into true cholera. We regard these returns as a medley of all imaginable cases, and a mere record of every person who happened to have asked the inspector for a dose of chalk mixture. We are sorry to find the Board lay so much stress upon them; but we shall have more to say on this point when we review the appendices of Dr. Sutherland and Mr. Grainger.

We must now leave this able and instructive document. It must be taken not as what the Report of the General Board of Health would have been had their machinery been perfected and their arrangements matured, but as a summary of the more important facts bearing on the prevention of cholera which have lately fallen under their notice.

The second work on our list is of a different character. While the Report of the Board of Health is devoted to measures of prevention, this deals chiefly with methods of

(a) In 1832 the population of London was 1,681,641, the number of reported cholera cases 14,144, and the deaths 6,729. In 1849 the population was estimated at 2,206,076; the number of attacks at 30,000, and the deaths as 14,601.

cure. It is the work of one who, having from various circumstances been obliged to make himself cognisant of the numerous modes of cure which were proposed during the epidemic, has become a firm convert to one particular plan. He has therefore recorded, for the edification of posterity, 172 different methods, which were held forth as potent or infallible remedies, and has at the same time brought forward some strong evidence in favour of the particular plan which he advocates. But although this appears to be the original intention of the work, there is also a great deal of most interesting and useful matter relating to the origin, progress, and nature of cholera.

The work successively treats on the modern history of cholera; its development and progress in foreign countries; the origin, nature, and causes of cholera; novel speculations on the cause of cholera promulgated during the last epidemic; the dwellings of the poor a source of cholera; appearance of the cholera in England; state of the metropolis and other cities; sanitary measures; an enlarged statistical and historical view of the second outbreak in 1849; and the proposed cures for cholera. Among the subjects of the many Tables which abound in the work are the following:—

"District; age; duration of attack; sex; atmospheric phenomena; atmospheric phenomena of August, 1849; progressive advance of the disease; positions of districts with respect to the river and sources of water supply; elevation of dwellings above high-water mark; average annual value of houses; average cost of house-room; annual mortality from all causes from 1838 to 1844; districts supplied by nine water companies; density of population; deaths from cholera to 10,000 persons living; sources of water supply; influence exercised by the quality of water over the mortality from cholera; moral and physical disease; mortality from cholera estimated on sex and conditions of life; mortality from cholera, proportion of, among various trades and conditions; chart of the progress of cholera, the plague of 1665, and of all other diseases, with the temperature and barometrical indications during the same period; comparative view of the population (male and female, and at various ages) as respects cholera; the four plagues of 1603, 1625, 1636, and 1665, compared with the cholera as to season; comparative view of typhus fever, and other diseases, with the cholera, during the same season; intramural interment; Bunhill-fields; various proposed remedies, names of the proposers, nature of the remedy, authority, and date of proposal; saline treatment; the daily meteorology during the second outbreak of cholera."

The last Table mentioned is a gigantic affair, giving, as it does, a statement of the various phenomena in meteorology for every day during the second outbreak, from May the 20th to November the 10th, 1849.

All these subjects are treated with much care,—sometimes very fully, sometimes more concisely, but always forcibly and eloquently. The greater part is necessarily a compilation from other sources; but it is well put together, and shows that the author has made himself thoroughly conversant with every fact bearing upon his subject.

In respect, more particularly, of the "Cures for Cholera," it is satisfactory to find how many of the absurd and ridiculous propositions included among the 170 schemes came from non-professional persons. The medical suggestions, although various, are usually sensible, and no doubt almost all were, more or less, useful. From the examination of all these suggestions, however, the author draws the following conclusion:—

"The great fact," says he, "that we learn from all this display of drugs and simples is, that none were really of use; while the practice of the homœopathist affords us a pretty good criterion of what proportion of those attacked will die when Nature is left to her own efforts to effect a cure. From 35 to 50 per cent. of the cases of cholera for which nothing was done, in which no treatment was employed, proved fatal. This list of remedies proves how little hope can be placed in any of the vaunted specifics hitherto examined to cure cholera."—P. 148.

The last chapter in the work is devoted to what the author confesses to be his principal object in publishing, viz., a succinct statement of Dr. Stevens's "Saline Treatment," as he pursued it in Coldbath-fields' Prison, in 1832, and the means by which, as the author says, that treatment was prevented from being generally adopted as the specific for cholera. It would be almost impossible to analyse this chapter, since it appears that it is, in itself, but a condensed statement of a case which is to be given in a fuller form through another source. It appears, however, from Dr. Bushnan's statement, that on the outbreak of cholera in 1832 in Coldbath-fields Prison, and after the proposed *modus medendi* of the Board of Health had failed, that Dr. Stevens was invited to superintend the treatment of the cholera cases on his own plan. This he did, subject to several curious interruptions which are detailed by the author, according to whose statement it appears, that while Dr. Stevens was allowed full control over the treatment, he was eminently successful; but that when this treatment was mixed up with other remedies, or abandoned altogether for the stimulant plan of the Board of Health, the mortality accruing was just that which was experienced in the late visitation in 1849. This statement of the case is supported by figures taken from the documents now in Coldbath-fields Prison, and also from the writings of the very parties whom Dr. Bushnan charges with something more than intermeddling in the affair. The whole result, as expressed in figures, is this, that in the first irruption in the prison, which lasted from April 5 to May 11, there had been 165 cases of cholera, of which 159 were treated on Dr. Stevens's plan with a result of 1 death, and, of course, 158 recoveries; and that, in the second outbreak, extending from June 3 to Dec. 27, there were 337 cases of cholera, of which 287 were treated with salines, and the mortality in that number was only 7. Thus the result in the two irruptions would be, "8 deaths under the saline treatment, and 438 recoveries; or a mortality of less than 3 per cent. in a total number of 446 cases of cholera, 201 of which had been cases of collapse." The opposite statement is then given, by which it would appear, that of 50 cases under the "old treatment," 19 proved fatal.

Comparing this mortality with what has occurred in 1849, the author remarks:—

"Those who refer to the many modes of treatment that have been proposed, with very slight evidence of their efficacy, will, we think, be led to study, with deep interest, the details now supplied as to a particular plan of treatment adopted in 1832, under which we show that, out of at least 1000 cases, the mortality was about 5 per cent. Why, then, with this result, was the last outbreak so fearfully destructive to human life? Had the properties of the neutral salts changed? Was the cholera of 1832 a different disease from that of 1849, or, if it were the same disease, were the constitutions of prisoners more susceptible of a particular remedy than those untainted with crime? Did the atmosphere of a prison favour the exhibition of the remedy, while that of the private dwelling effectually impeded it? Assuredly not. The answer will be found in a simple fact, that a man of unimpeachable honour and integrity,—one who had already done much for medical science, having discovered and successfully employed a remedy for this disease, was assailed and vilified in the most unjust manner, and a practice calculated to mitigate the sufferings of mankind, and to check the progress of mortality, repudiated and condemned for purposes to which true science and the public good were total strangers."—P. 168.

To understand these allusions, it should be mentioned, that grave charges are brought forward in this book against Sir David Barry, the Government Inspector in 1832, and Mr. Wakefield, the Surgeon to the Coldbath-fields Prison. These gentlemen are accused of unfairness, tergiversation, and falsification. We refer, however, to the book itself for the statement, which is too long for our pages, and also for the full detail of the evidence on which so confident an opinion of the merits of Dr. Stevens's plan is based. We can only say, that, if the evidence be correct, and if the mortality of cholera could have been reduced from 50 to about 6 per cent., the assertion demands the most searching inquiry and the strictest scrutiny, and that not only by the profession, but by the Government itself.

Dr. Bushnan supports his history and his views, by testimonies from various quarters, among whom we mention Dr. Kendrick, of Warrington; Mr. Bossey, of Woolwich; Dr. Marsden, of Greville-street Hospital; Dr. Pinckard, Physician to St. Giles's Hospital; and Mr. Moss, of Windsor; and states, that the experience of all these gentlemen, and also of the practice in Abchurch-lane, Bridewell, and St. Luke's Hospitals, went to confirm the views of Dr. Stevens, and to establish the value of the saline treatment over all other remedies; and the Author says, in conclusion:—

"Many other testimonies of a similar kind might be collected at home and abroad—from foes as well as from friends; but to record their results, or discuss their bearing, would carry us far

beyond the limits assigned to the present work. Wherever the saline treatment has been fairly and fully tried—upon the principles and according to the plan of Dr. Stevens—we find evidence that the mortality of cholera has been reduced below that of typhus fever. Such evidence we obtain not only from the discoverer and his more immediate friends, but from practitioners in various parts of the world—from men totally unacquainted with Dr. Stevens—from men above suspicion, and to whom no unworthy motives can be attributed. To their testimony we join our own—the result of a conscientious examination of the whole subject; and unmixed will be our satisfaction if we shall find that our humble efforts have served to elicit the truth."

We would fain put certain questions to Mr. Wakefield, in order to elicit further information as to the secret history of the saline treatment of cholera in the infirmary wards of the prison of Coldbath-fields; but for the present we refrain, since we are assured that another work is in the press, in which the evidence now briefly sketched by Dr. Bushnan will be fully detailed, and Dr. Stevens's method proved to have been there as successful as Dr. Bushnan asserts it to have been. In that work we are told it will be more clearly shown that the most unfair and unprofessional means were employed for the purpose of throwing doubt and disbelief upon the discovery of Dr. Stevens, and of robbing him of the merit that so justly is his due.

We have taken much pains to examine the evidence that has now been brought forward. We have carefully read the medical records of Coldbath-fields; and we cannot but agree with Dr. Bushnan, that they fully bear out his assertion, that the saline treatment of cholera has been the most successful of any yet proposed when employed according to the plan of Dr. Stevens, and that Dr. Stevens himself has been a very ill-used and disgracefully requited man.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

DEATH FROM CHLOROFORM.

An unfortunate accident, the result of domestic practice, and the use of a dangerous remedy by one of the uninitiated has just occurred during the *fête* of Asniers, a small village in the neighbourhood of Paris.

A young painter, of some merit, had been in the habit, it would seem, of employing chloroform for the relief of toothache, to which he was frequently subject. Having experienced a severe attack after dinner, he retired to his bed-room for the purpose of applying the remedy. Half an hour elapsed, and the young man's wife, becoming uneasy at his absence, hastened to the room. He was lying on his bed, with the handkerchief still applied to his mouth. The unfortunate woman called him, touched him, and removed the handkerchief. He was dead. This, I believe, is the first example of a fatal accident from the use of chloroform in the hands of one not connected with the medical profession. It should be made known extensively, in order to warn all persons against the imprudence of meddling with a remedy which even the utmost efforts of medical skill cannot always divest of its dangerous or fatal qualities.

THE ACADEMY OF MEDICINE

took possession of its new establishment on Tuesday last, when inaugural discourses were pronounced by M. Bricheteau, the President, and by M. Dubois, (d'Amiens,) the Perpetual Secretary. The meeting was numerous, considering the season of the year, and all the "notables" still in town mustered under the wing of M. Dumas. As it was a family affair completely, nothing occurred which could interest readers on your side of the water.

NEW APPOINTMENTS.

The chairs left vacant by the death of M. de Blainville have at length been officially filled up. M. Isidore St. Hilaire, author of the well-known work on Monstrosities, obtains the chair of Natural History at the Sorbonne. M. Duvernay succeeds to the chair of Comparative Anatomy at the Garden of Plants. It is a curious fact, that M. Duvernay had filled the same chair so far back as 1808.

Your friend, M. Sedillot, Professor at Strasbourg, has been raised to the rank of Commander in the Legion of Honour. It is not stated how far his discoveries touching cleft-palate have led to this promotion.

SCOTLAND.

ALLEGED GREATER MORTALITY OF FEVER IN HOSPITALS THAN IN THE HOMES OF THE POOR.

Edinburgh has long been one of the head-quarters of contagious continued fever, and whatever relates to its propagation, course, and mortality, creates a strong interest amongst us. Dr. James Adams, of Glasgow, has published lately a memoir, the design of which is to show the greatly higher mortality of contagious continued fever in public hospitals and fever houses than in the homes of the poor. The subject of his memoir is one which could not pass undebated amongst the medical practitioners of Edinburgh. Of the bare fact, in behalf of which he reasons, viewed in the light of a pure generality, there is no room to doubt. But most of us are far from being agreed with Dr. Adams as to the real signification of this fact, and as to the justness of the colouring which it has received in his hands. The fact itself (if a statement plainly involving so many discordant particulars deserves the name of a fact) has been long familiar to us. And, so long as the documentary evidence placed before us showed no excessive difference in the mortality under two states of circumstances so opposite in their character, there was nothing to surprise those who are accustomed to look below the surface of things as to the result. At the same time, without forgetting that Dr. Adams is not an hospital physician, but a Glasgow district surgeon, largely concerned in the treatment of continued fever among the poor of that city in their own homes, we feel obliged to him for opening up, in a decided manner, a question, the settlement of which embodies consequences of the very last importance towards the adjustment of the rules of our sanitary codes. When we read over and over the memoir of Dr. Adams, and consider how much pains he takes at every step to obviate the possible fallacies which he encounters, we cannot help exclaiming, how difficult is the way to truth through statistics! For we never lose sight of the necessary axiom, that, if a professed statistician is left to have his own way, there is nothing which the reason of mankind has established on mere grounds of moral certainty that he will not overturn. The case which Dr. Adams has undertaken to settle by statistical evidence is a striking example of the difficulties which beset conclusions from that mode of investigation. Such difficulties, indeed, are not universal in statistical investigations. Whenever the individual instances founded on numbers possess one unmistakeable mark, involving all the particulars referred to in the result, then the conclusion carries with it the force of a mathematical demonstration. For example, if the proposition be, that, if a pair of dice be fairly thrown for thirty-six thousand times, sixes will turn up about one thousand times, the truth of the proposition can he tried by statistics, without the least fear of fallacy, provided ordinary attention be bestowed on the experiment, because the turning up of sixes is a definite idea, and involves nothing but what the expression used fully includes. But the moment the individual instances which make up the numerical results admit of any considerable latitude of character, then a source of fallacy is admitted proportioned to the latitude through which these individual instances range. Every case of fever is, indeed, a unit in the numerical results compared, but how great differences between those units would be found, could they be severally compared as to the tendencies to death already fixed in the constitution before the fever commenced. The comparison made by Mr. Adams is between cases of fever sent to hospital and cases treated at home. And if the question be asked, why any cases are sent to hospital, instead of being treated at home—which is the only natural course,—the answer will be, either that the patients had no homes, or that there was nobody to take care of them there, and in Scotland, till within these few years, when the new Poor-law came into operation, even then that they had no means of obtaining the most trifling necessaries unless sent to hospital. But how much is contained in these answers as to the existence of various forms of tendency to death in the constitution before the fever commenced. In short, how can two classes of cases be fairly compared, when the one includes all the most destitute, the half naked, the half starved, those who have been, perhaps for months previously, exposed to all the circumstances which most effectually prepare the way for a fatal attack of fever, while the other includes the families of industrious artizans and labourers, who for years have enjoyed the chief conveniences of life, with the exception, that when attacked by sudden sickness they cannot afford to pay for medical aid. It would, doubtless, be easy to show that the fever hospital contains patients derived from both the classes now described; but while it necessarily receives all the destitute and houseless, it will be sought after by comparatively few of those who have the comforts of a home. How much of the difference in the mortality of the two classes of cases should be

ascribed to this important difference in the kind of individuals concerned, it is not easy to estimate; but it is plain, that without some distinct settlement of this point, the rest of the question must remain undetermined. Dr. Adams endeavours to show, that there can be no material difference in the severity of the cases sent to hospital as compared with that of those treated at home. Whatever may be the state of things in this respect in Glasgow, it is very certain that in Edinburgh the severest cases are those chiefly sent to the infirmary, or selected there. Dr. Adams has cited some Edinburgh statistics on this subject,—namely, that the mortality of fever in the Edinburgh Royal Infirmary during the three years, 1840, 1841, 1842, was as high as 1 death in 7; and that in the practice of the Edinburgh New-town Dispensary during the same years, there was only 1 death in 14 cases. The mortality in the New-town Dispensary, according to the numbers stated, is even less, being more nearly 1 in 16 than 1 in 14. But every medical man in Edinburgh knows that the cases at that time treated at home by the medical officers of the New-town Dispensary were of a very different character from those received into the hospital. At that time the new Act for the relief of the poor in Scotland had not come into operation, and the Destitute Sick Society, which chiefly afforded relief to the destitute in illness, gave no relief in cases of fever, because they considered that the spread of fever among the population was best prevented by having fever cases sent to the hospital as speedily as possible; and thus the cases of fever treated in the New-town Dispensary must have been chiefly among the members of families enjoying some degree of comfort, and in particular females and children. From the table, given by Dr. Adams, of the Glasgow cases of fever during a period of ten years prior to 1848, it appears that the mortality in out-door practice has at no period approximated to that in hospital, and that the gross mortality for that whole period gives in out-door practice one death in twenty-two cases, and in hospital one death in eight cases. Notwithstanding all the deductions we are disposed to make, of which a specimen has been given above, we confess that this statement, founded as it is at least on well-considered grounds, ought to draw a more close attention to the subject than it has yet received. Before, however, we can join in condemning fever hospitals, many things are to be taken into account and inquired into. It may be quite true that the mortality is necessarily greater in fever hospitals than if the same patients who have homes had been treated there, and yet that those institutions may be a public advantage. It has always been considered in Edinburgh that the removal of fever patients as speedily as possible to a fever hospital is one of the chief means of preventing the more extensive diffusion of the disease throughout the population. Thus, if fever hospitals have this effect, there may be a higher per centage of mortality, but a far less mortality on the whole population of a town than where there are no such institutions. This is a subject of paramount importance. The great extent of our two last epidemics in Edinburgh is highly favourable to this supposed effect of fever hospitals, since the unusual number attacked plainly arose from the excessive crowding of the apartments in which the Irish railway labourers live. And as to the objection, that every hospital becomes itself a focus for the spread of the disease, we have yet in Scotland to try the experiment so strongly urged by the whole history of hospitals, of giving sufficient space to the sick. There ought to be such an amount of space to each patient as will at once afford an additional chance of recovery, and diminish the risk of the spread of the disease. And as to the attendants, some pains might be taken to secure persons who had already suffered a distinct attack of typhus, which, to no small extent, is a protection, according to the universal belief among us.

GENERAL CORRESPONDENCE.

TREATMENT OF PERICARDITIS.

[To the Editor of the Medical Times.]

SIR,—I have read with no little pleasure, the letter of Dr. Davies, of Bath, in your last publication, with respect to a case of pericarditis at Guy's Hospital, which I lately sent to the *Medical Times*. Agreeing with your correspondent as to the very serious nature of the question involved,—the removal of one of the most common sources of heart disease,—pericarditis in rheumatism,—and fully aware as I am that his only object is the eliciting of truth, I readily join issue with him on the subject. On looking through his letter, I believe I may say we differ little; but on some matters of recent speculation and opinion, I have been particular, in the report, to keep the facts of the case quite separate from matters that may admit of discussion; and one of my chief objects in first noticing the case, as you may perceive by referring to the original paper, (page 142,) was to elicit the fact, whether our further experience would continue to corroborate those views recently put forward. Indeed, I cannot conceive anything more practically valuable than discussing such moot points in your universally-read pages, and making our way out of the difficulties that beset us by means of all the lights we possess; and in speaking of difficulties, I would not wish to be understood as implying that, in our general management of heart disease and lung affections, we have not grand land-marks to guide us, or that we should disturb our old telegraphs till we are quite sure of the new; yet for myself I must say I have seen such singular things in the way of treatment in Paris and other places, such comical management of cases among our mystical friends in Germany, to what we are accustomed in London, that I am every day more and more satisfied of the fact, that there is a wide field for improvement yet open in our practice of physic in this very direction.

In pericarditis, need I say, though Dr. Davies trusts so much to it in his letter, our Continental friends seldom or never give mercury. Bouillaud recommends bleeding, and little else. Bouchardat, again, says too much bleeding will protract, if not bring about pericarditis. Chomel says, cases of simple pericarditis most commonly get well, whilst the complicated cases are as often fatal,—putting one in mind of the old dilemma of Pliny. The experience of Dr. Taylor, of Huddersfield, in those very valuable communications to the *Medical Times* last year, was the same; he gave us the result of thirty-eight cases of pericarditis, of which twenty-one died, two-thirds of whom had renal disease; the uncomplicated cases nearly all getting well. Then as to the use of mercury, perhaps, our opinions are not more certain. Dr. Davies in his letter says, "the sooner the system is brought under its influence the better;" with some little reservation, I agree with him. Yet salivation has been stated not to have that marked effect in promoting the absorption of lymph that he is so sure about; there is a good deal of faith at present, in the schools here, in the action of nitrate of potash, acetate of potash, iodine, &c., in disintegrating and removing such fluids. Taylor's statistics would go to prove, that the removal of such products, and the occurrence of salivation, are mere coincidences; Latham, one of the greatest advocates for the use of mercury, leads us to think it only useful in constitutions free from scrofula or other specific taint; Louis says, it is just here that unaided Nature works such wonders, and that we will find in scrofulous and analogous cases, diseased kidneys, &c., this good turned to evil. We must recollect, also, that pericarditis may run its course, end in adhesion without any treatment, and recover—of course a very false guide as to the treatment of individual cases; yet Dr. Davies himself will admit, a very disturbing element in any calculation we may make, or any general law as to the indiscriminate value of this medicine. I would not, of course, recommend the discontinuance of mercury in every case, neither would I shut my eyes to these opinions. The more interesting portion of Dr. Davies's communication I have left for the last; it is that relative to the nature of the cure effected in the case that has given occasion to his letter, and which all the men I have consulted here quite agree with me about. If I have turned the letter upside down, it is that we may now, perhaps, better understand this, the chief part of it.

Reverting to the history of the case, he says:—"Now, if we take the language used in describing this case, there will be conveyed the notion of old endocardial and recent exocardial mischief," &c., with which he finds fault. I am not aware of any physical signs of exocardial disease till perhaps the 20th, and the slight endocardial disease of some standing was a matter of inference, as the woman had it from the day she came in, and had suffered a little before from another attack of rheumatism, a point left out in the general history by Dr. Davies. It was very slight at best, and, from the 18th to the 28th, the bruit was completely lost in the pericardium sounds. On the 18th, the action of the heart being more excited, the bruit was a shade more marked, of course, than the day previous, then it was "very feeble; not noticeable at all along the aorta, nor with the second sound;" in fact, one of those transcendental niceties of diagnosis one only meets in hospital, and which, at the time, claimed very little notice. I believe if the woman was very largely bled we should have had a deposit of fibrine in the net work of the valves, and bruit enough! as it was, it was very safely left out of consideration; the words "perfectly recovered," a month after, very evidently alluded to the original acute attack of pericarditis; the head and front of the young woman's sufferings,—not to the slight amount of bruit, which I think we may safely put out of court; certainly, so far as treatment is concerned, with the ex-

ception, perhaps, just mentioned, that it would contra-indicate too much bleeding; the "to-and-fro" sound coming after, still further supporting this view of the management of the case.

Of course every one is aware, that in rheumatism, we have generally endocarditis; with pericarditis we have no law in the case; yet I feel assured, had Dr. Davies watched this case with the attention I did, he would agree with me in my original view, that the case was one of pericarditis, *uncomplicated* with endocardial disease. I am quite satisfied of the matter in my own mind; indeed, so sure, that it never once suggested itself to ask Dr. Barlow his notion of the matter; and it surely would have somehow crept into some of our notes, all the time of the rubbing sounds, if any of our ears detected this original "very feeble bruit." I quite took credit to myself detecting it at all, put down everything in the true spirit of Mr. Ruskin for the eliciting of truth, not at all aware of the *cheval de bataille* I was building up for Dr. Davies and myself to knock down again. I lay no importance either on the woman going out with what Dr. Davies calls "permanent *bruit*." He thinks me a little too dogmatical in asserting it was a case of recovery; this *bruit*, it must be remembered, was the same she brought in with her, and if not a case of recovery, none of Bouillaud's cases are cases of recovery. On the 1st of July "the friction sound quite disappeared, and it is assumed" erroneously, Dr. Davies thinks "that the disappearance of the friction sound is consequent on the resolution of the inflammation and absorption of opposed lymphs;" and he then goes on to tell the familiar terminations of pericarditis. He seems to agree with the old legend of the schools, that such a thing as cure by absorption is impossible; We have, unfortunately, no diagnostic sign of adherent pericardium; no sign to tell us where resolution takes place. Yet, from the attentive watching of this case at the time, the very evidently small amount of lymph thrown out, the opinions of the best men who saw the case; the excellent effect of the nitrate of potash which, it must be remembered, she took all through her illness; the amazing *quietness of the pulse* at the time of the dismissal a month after—not "three days," as he suggests; the satisfactory way in which all the symptoms gradually yielded, not leaving a trace of exocardial commotion of any sort; the general appearance of the woman so difficult to put on paper—(she expressed herself never better in her life)—I looked upon the case then, and do now, as one of *perfect recovery by absorption*. In a conversation to-day with Dr. Barlow he agrees with me; he sees no difficulty in the matter; nor, I must confess, do I. When Dr. Davies gives us something besides our old negative speculation—some diagnostic sign, besides the quietness of the pulse, which, in this case, by the way, told quite against him—I shall be most happy to modify my opinion; and we shall have both, perhaps, assisted in adding a new fact to our science. The mechanism of the absorption or disintegration of lymph is now so well understood in the schools here, and so clearly put forward by Mr. Paget, that, however venerable the old word "impossible" may be in the perfect cure of pericarditis, we may now, perhaps, discard it, we see spots on the heart every day in *all kinds of post-mortems*, the result of these cures. With the greatest respect for Dr. Davies, and your kindness in allowing us so much of your valuable space. —I am, &c.

CHARLES KIDD, M.D.,
Member of the College of Surgeons, England.

10, Kingsland Crescent, London,
September 16, 1850.

P.S. If mere *negative* speculation is to guide us, I, for my part, do not know what advance we are to make in practical medicine. A man says, "Well, really it is all very well, but I never do find cases of fever recover." I ask him if he has read the papers of Dr. Jenner; he says not. If he has dipped at all into Louis; "No." Ever had an hour's talk with Graves or Stokes in Dublin, the first authorities in the world on fever; "No." I say then to him, "Curious; yet I have had hundreds on hundreds of cures myself, and have seen thousands of cases of recovery."

MENTAL REQUIREMENTS IN THE PRACTICE OF LAW AND PHYSIC.

[To the Editor of the Medical Times.]

SIR,—My attention was arrested by a letter signed Lionel J. Beale, in the last number of the *Medical Times*, of the date August 24th, on the subject of "Mental Acquirements in the Practice of Law and Physic." In it is an attempt to institute a comparison, and to come to a decision, whether the study of physic or the law requires equal or superior intellectual powers and training. If I understand Mr. Beale aright he unhesitatingly awards the palm to lawyers and the law. Had he confined himself to this matter, I had not troubled you. I think, however, when glancing over ones library shelves, at the names of only a few of those who have left (some on one subject, some on another) the splendid monuments of profound study and learning to our profession as heirlooms for those whose opportunities and talents could never hope to produce such results,—when I see before me some of the colossal labours of an Owen, Lawrence, Liebig, Copeland, Prout, Müller, Louis, Andral, Majendie, Milne Edwards, Stokes, Graves, Holland, of modern days, I am tempted, on some slight acquaintance with their writings, to think that, making all due distinction for the difference of their sphere of action, and its objects and aims, that minds as highly gifted by nature, and as disciplined and adorned by art, have animated them in their labours, as ever produced a Coke, a Mansfield, or a Blackstone. There are certain abstract qualities of mind more used, and, therefore, in greater perfection in the one profession than in the other; but, taken collectively, I believe, for true eminence in its best sense, that little or no difference in the amount of intelligence is required. Nothing is, however, more clear, or better established, than that but a very small portion of education, even professional, is adequate to conduct a successful practice in a certain way, and, as a consequence thereof, it might safely be predicted, as is indeed the fact, that the status of the profession with society is not high, or what it ought to be. Neither does this find an adequate explanation in the fact, that we are, as a body, poor; or, that there are no such things as political recognitions annexed to eminence or excellence. The little influence we do possess is not derived, I am strongly of opinion, from the general practitioners as a body; and, although I think your correspondent unjustly terms the College of Surgeons a "delusion," which it is not, so far as enforcing a good surgical education goes, and that implies much to every conscientious and zealous student; yet, looking at the results, I must own it falls miserably short as a board of "surgical education," not to say "medical," for the requirements of the day in which we live, and the administrations of the trusts and powers committed to its hands. To its oversight or omissions of duty, and in consequence of having no guarantee for the efficient education of its members prior to entering on a professional one, how few have come to the study of their art with minds previously formed and moulded by a liberal course of learning; and to this must be in part attributed the humiliating admission, that we number men in our ranks not a few, as innocent of liberal and polite or scientific knowledge as though their destinies had been originally some of the most mechanical and humblest vocations. The results are manifold. Not capable of analysing symptoms, or adducing any significance from them in any methodical way, they rely on tact and chance rather than a well-digested plan of treatment. 2nd. The unbecoming expedients for notoriety of others. 3rd. The want of unity of action and cohesion in all. 4th. Their public estimation as a body very limited, and therefore their pecuniary emoluments proportionate. If, then, what I have stated be true, it must occur to every one who wishes well to his profession, that that corporation only is fit to be intrusted with licensing candidates as practitioners, in whose hands the powers are placed to effect the preliminary education, or who require, by their statutes, a sufficient security for its comprehensiveness and adequacy. Nothing short of this will enable the general practitioner to keep up with no laggard pace with the advancing progress of most professions around him. Few men should combine more excellent qualities than they. The distinctions that separate physicians or pure surgeons from the general practitioners are arbitrary and undecided, and are generally determined more by individual superiority practically, than by anything resulting from their medical degree. Many a general practitioner enjoys a local reputation, which no physician or pure surgeon could obtain, and *vice versa;* but this depends, as I said before, on the individual more than the circumstances.

A body which stands in such useful importance to the public, and which is required in support of its pretensions to exercise the resources of its art in such varied departments with tolerable skill and precision, are well deserving a fostering hand from those who legislate for the country's weal. To overlook and pass them by is to incur, there cannot be the slightest doubt, an immense responsibility. I do not for a moment wish to supersede the physician or pure surgeon; let those whose means and leisure allow, with opportunity, their exclusive devotion to the study of medicine, or surgery, or midwifery, follow, by all means, the bias of their inclinations; and may they, in the communication of their light and labours, reap the confidence of their brethren, whose observations are diffused and exercised over a wider, and, therefore, less studiously explored field. But, since it is the general practitioner who is chiefly the great circulating medium of timely help and aid in

periods of sickness, therefore it behoves all who stand at the head of the affairs of this country to render them every help, and lend a ready ear to their wants and wishes.

I have penned these few hasty remarks in consequence of reading Mr. Beale's letter, which is one of the first efforts I have seen for placing the general practitioner on his future and proper basis—for enabling him to be even more useful and appreciated. It may be, that in insisting on higher mental qualification and training, we are entailing more self-denial and expense on parents, more labour of mind and body on a future generation, and that contemporaneously with less remuneration; but, if it be not so provided, the medical profession will find a more or less successful rival in every dupe of himself, or any mountebank who may arise to compete with him for the *honorarium quid*.—I am, Sir, yours &c., A READER.

Hereford, Sept., 1850.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

[To the Editor of the Medical Times.]

SIR,—I am directed to forward to you the accompanying copy of the report of the General Committee, submitted to and approved by the Council of the National Institute at their quarterly meeting, held at the Hanover-square Rooms on Wednesday last, the 11th instant, and to request of you the favour to publish it in the next number of the *Medical Times*.

I am, Sir, &c.,

HERBERT WILLIAMS, Sec. *pro tem.*

Office, 4, Hanover-square, Sept. 14th, 1850.

REPORT.

The Committee, in accordance with the resolution of the Council agreed to at the last meeting, took immediate steps to place the Bill for the Incorporation of the General Practitioners into the hands of James Wyld, Esq., M.P., in order that it might be presented to Parliament as speedily as possible, and they are enabled to report that the Bill was laid on the table of the House on the 23rd of July last, with an understanding between that gentleman and the Government, that it should not be proceeded with during the then session of Parliament; the Bill has since been printed by order of the House of Commons.

With the view of securing future co-operation in support of the proposed measure during the ensuing session of Parliament; and also of increasing the pecuniary resources of the Institute, the Committee have deemed it expedient to forward the following note to those gentlemen who, although not members of the Institute, are in favour of the incorporation of the general practitioners.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

"4, Hanover-square, Aug. 20, 1850.

"SIR,—I am directed by the Council of the National Institute to inform you, that the Bill framed for the Incorporation of the General Practitioners has been presented to the House of Commons by James Wyld, Esq., and Colonel Thompson, and printed by order of the House, and may be obtained at the office for Parliamentary documents, Great Turnstile, Holborn. Should you wish for a copy I shall be happy to forward one to you. The Council are most anxious to afford those gentlemen who favour the measure every information on the subject, in the hope that they will use their best exertions to disabuse the minds of such of their professional friends as may entertain groundless fears and misapprehensions with reference to the proposed measure; and with the view, also, to secure their co-operation and support, during the ensuing session of Parliament.

"I am desired further to inform you that the introduction of the Bill into Parliament, and the means necessary to be adopted by the Council to facilitate its future progress, will be attended with considerable expense; the Council of the National Institute therefore feel, that, at the present period, they are fully justified in placing most prominently before the profession the subjoined copy of a resolution unanimously agreed to at a General Meeting held at the Hanover-square Rooms.

COPY OF RESOLUTION.

"'That the interests of the profession at large at the present moment demand that unanimous and cordial support be given to the National Institute, for the purpose of maintaining, strengthening, and extending the present organization of the general practitioners in medicine, surgery, and midwifery; and that a voluntary subscription-book be forthwith opened for the purpose of collecting funds to enable the Council of the Institute to carry out in full the measures now adopted by this meeting.'

"The Council cannot but entertain the greatest confidence, that the just appeal contained in this resolution, will be cordially responded to by those who advocate the independent incorporation of the general practitioners, especially by those who have evinced, in the schedules returned, their desire to accomplish this great object.

"I have the honour to be, Sir,

"Your most obedient, servant,

"HERBERT WILLIAMS, Sec. *pro tem.*

"Subscriptions of any amount may be forwarded by post-office orders, or otherwise, either to Edward Tegart, Esq., or John Dodd, Esq., Treasurers; or, if by post-office order, made payable at the post-office, Old Cavendish-street."

Several letters of a favourable character have already been received in reply to this communication; but as its issue is of recent date, the Committee are unable to state how far the application may prove generally successful.

Since the last meeting of the Council, the Committee have had occasion to consider the suggestions contained in the letter recently transmitted by the Society of Apothecaries to Sir George Grey for the purpose of effecting an alteration of the Act of 1815, and they have, in consequence, felt it their duty to forward to the Society a resolution, condemnatory of the course therein suggested, it being not only inconsistent with the principles they have hitherto advocated conjointly with the National Institute, but as tending to prejudice permanently the interests of the general practitioners.

COPY OF RESOLUTION.

"That this Committee, having considered the propositions contained in the letter from the Society of Apothecaries, to the Right Hon. Sir George, Bart., for altering the Apothecaries' Act of 1815, hereby declare, that they cannot support any scheme for regulating the education and conducting the examinations of the general practitioners in medicine, surgery, and midwifery, which is incomplete, or which does not embrace all the branches of education and practice necessary for the efficient performance of the duties of general practice. That, in particular, the Committee repudiate the remodelling of either of the existing Institutions (as they have hitherto the establishment of any new Institution) that is not based upon the unity of medicine and surgery, and which, in the education and examination for admission into such Institution, (which is also intended to confer a title to practise,) does not embrace all the branches both of medicine and surgery.

"That the want of proper authority to examine in surgery has at all times operated prejudicially upon the examinations instituted by the Society of Apothecaries; and that this Committee unequivocally condemns any proposition to alter that Act which doer not embrace an amendment in this essential point. That the unity of medicine and surgery has been the fundamental principle of the National Association and of the National Institute, and has been consistently adhered to throughout; and that, without questioning the right of the existing institutions to retain their special character, the Committee resolves to adhere to this principle in reference to the education and qualification of the general practitioners, as essential to any measure of medical reform."

An acknowledgment only of the receipt of this resolution has as yet been received from the Society of Apothecaries.

At the annual general meeting of the members of the Institute, which took place on the 14th of August last, the report having been read and approved, the following resolution was unanimously adopted:—

"That this meeting, deeming it inexpedient at the present time to proceed to the election of a new executive, do now adjourn until the second Wednesday in December, and that the present Council be requested to continue to conduct the affairs of the Institute in the interim."

The Committee hope that, at the period mentioned in this resolution, circumstances may enable the Council to suggest to their constituents and the profession generally, some decisive course of action for their adoption, in order to sustain, during the ensuing Session of Parliament, those principles for which they have so long contended.

On taking a retrospective view of the proceedings of the National Institute, and the present state of the Medical Reform question, the Committee reiterate the sentiments which were specially addressed to the Shropshire Medical Association, in their Report of August 9th, 1848. In commenting on the petition forwarded by that body to the House of Commons, the Council of the Institute stated, on the part of the general practitioners of England, that, if the object of the petitioners could be obtained, "viz., the concentration of the great body of the profession in the College of

Surgeons, with a ten years' franchise, the right of voting carrying the right of holding offices of honour and distinction in the College, under proper limitations, but with no distinction as to whether the individual practises as a surgeon purely considered, or as a general practitioner—by which modification of the constitution of the College of Surgeons, the general practitioners would have an efficient control over their own affairs, and a direct influence over the examinations of their own class—that their demands would be satisfied."

The foregoing principles have invariably been advocated by the National Institute upon every occasion, so far as they relate to the College of Surgeons; and the Committee propose, on a future occasion, to lay before the profession their opinions on the scheme enunciated by the Council of the Royal College of Surgeons, in their last communication to the Right Honourable Sir George Grey, Bart.

NATHANIEL CLIFTON,
Chairman.

Sept. 11. 1850.

CASE OF HYPOSPADIAS, INVOLVING A QUESTION OF PATERNITY.

[To the Editor of the Medical Times.]

SIR,—While the question is mooted in your columns as to this malformation of the penis being a cause of sterility, the record of the following case may not be altogether uninteresting, especially as I am unaware of the defect in question having been brought forward in a court of law as an argument of non-paternity. The case occurred in this town on Friday last. A. B., a good looking girl of 18, sued C. D., a lad of 17, to show cause why he should not pay for the maintenance of a certain "pledge of affection." C. D. demurred, knowing he was not "a proper made man," and he was accordingly brought to the infirmary for me to examine. On an inspection of his penis I could not at the proper place see any urethral orifice, but in lieu thereof found simply a depression. On the under surface of the penis was a minute elliptical aperture, an inch and a half from the extreme end of the glans; this aperture being invisible until the skin was made exceedingly tense. Through this orifice there came, after much straining, a slender stream of urine of about the thickness of a small probe. The lad's male organs were healthy, but rather small. On the following day the fact of this malformation was brought forward by the counsel for the accused, as cause for non-payment towards the maintenance of the child. My evidence being required was in substance to this effect—that from the malformation which existed I did not think it altogether impossible for the lad to beget a child, but that it was highly improbable he could do so, and for these reasons:—

The very small size of the orifice; the complete obscuration of that orifice by the slightest fold across it; its *lessened capacity* (if not total occlusion) *during coition*, from the erectile state of the organ and the loose tissue of the orifice; the slender stream of urine even after great straining; the difference in consistence between the urine and the seminal fluid; that if any semen could escape, it must be by guttation, drop by drop; and, lastly, that from the very nature of the orifice, (bounded externally by a semilunar fold of membrane), there was every reason to suppose, if any semen did escape, that it could not be so lodged within the vagina as to cause conception. In making water, the penis had to be *depressed* to allow a stream to pass, as in the erect state (as in coition) the urine dribbled back again down the perinæum.

On these grounds, (and making due allowance for the usual excitement during the act,) I gave, as my decided opinion, that, though not impossible, it was, nevertheless, *highly improbable* that he could become a father. The girl was then allowed, on her part, to have another surgeon to examine the lad. He, however, was very soon satisfied, merely asking A. B. if he "could make water;" and on receiving for answer, "a little sometimes," told him, *without any examination*, that he "could get a child as well as any one;" and, on deposing to that effect before the magistrates, they—he being my senior in the profession—decided that the lad was the father of the child, and ordered him to pay 1s. 6d. per week for its support. Now, I will not say the decision rested on the evidence of this so-soon-satisfied witness, but I do think, in a case where a vital question is at issue, a little more care should be bestowed by the surgeon who has to pronounce on so important a point. Had I again a similar case, I should again give a like decision, and for the reasons I have named.

With regard to the Article "Sterility," in your Number for August 31st., I agree with "M. D.," that the defect in question may often be a cause of sterility, and that, in deciding such a point, the situation of the orifice must be considered; but this latter question I do not deem of so much weight as the *size* of the orifice; for if the orifice be so situated, that in coition its edges would be apposed to the inner surface of the vagina, and yet at the same time be so small as to prevent the semen escaping, except drop by drop, then I do think we may reasonably and justifiably raise a doubt as to the important question of paternity; but if that be not permitted us, then have we no alternative but to revert to the exploded dogma of the "*aura seminalis.*"—I am, Sir, &c.,

Kidderminster, Sept. 9, 1850. T. WALDRON BRADLEY.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—From a statement (just published) of the receipts and expenditure of this Institution, during the past year, it appears that the former amounted to 11,722*l.* 2s. 7d., and the latter to 11,031*l.* 18s. 2d. The following are the sources of income, with the amount from each:—

Fees from Court of Examiners	£8,705	15	0
Fees on admission to the fellowship	430	10	0
Certificate of having received the diploma	5	5	0
Fees on admission to Council and Court of Examiners	105	0	0
Sale of Lists of Members, Catalogues, &c.	55	10	9
Dividends on investments in Government Securities	970	1	10
Produce of Policy of Assurance on life of Mr. Clift	1,450	0	0
Total	£11,722	2	7

The disbursements are divided under the following heads, viz.:—*College Department*, including council, court of examiners, auditors, fellowship, diploma stamps, list of members, law expenses, salaries, wages, coals, &c., 5,576*l.* 8s. 8d. *Museum Department*, including catalogues, specimens, spirit, bottles, studentships, salaries, wages, &c., 2,122*l.* 5s. 0d. *Library Department*, including purchase and binding of books, salary, &c., 407*l.* 3s. 4d. *Miscellaneous*, including taxes, insurance, furniture, &c., 491*l.* 3s. 7d. Repairs and painting, 132*l.* 5s. 7d. *Under Deeds of Trust*, including oration, lectures, and prizes, 388*l.* 4s. 6d. Purchase of 500*l.* 3 per cent. consols, 464*l.* 7s. 6d. Purchase of 1,518*l.* 6s. 6d. reduced 3 per cents. in trust for Mrs. Owen, 1,450*l.* Balance due to the bankers, 30th June, 1849, 65*l.* 15s. 4d. Balance at the bankers, Midsummer-day, 1850, 624*l.* 9s. 1d. Total 11,722*l.* From the published statement it will be perceived, that the incidental income amounts to 10,752*l.* 0s. 9d.; the permanent income to 970*l.* 1s. 10d. The incidental expenditure to 7,525*l.* 16s. 6d.; and the permanent expenditure to 3,506*l.* 1s. 8d.

MILITARY APPOINTMENTS.—Royal Newfoundland Companies, staff-surgeon of the second class James Clephane Minto to be surgeon, vice Grant, deceased. 33rd Foot.—Assistant-Surgeon James Webster, M.D., from 93rd Foot, to be Assistant-Surgeon, vice Dempster, who exchanges. 93rd Foot.—Assistant-Surgeon James C. Dempster, M.D., from 3rd Foot, to be Assistant-Surgeon, vice Webster, who exchanges. Hospital Staff.——Surgeon George Douglas Dods, M.D., from half-pay 36th Foot, to be staff-surgeon second class, vice Minto, appointed to the Royal Newfoundland Companies; Staff Assistant-Surgeon James M'Gregor, M.D., to be Assistant-Surgeon of the second class, vice John Duncan M'Diarmid, M.D., who retires upon half-pay; Assistant-Surgeon Edmonds R. Richardson, from the 95th Foot, to be Assistant-Surgeon to the Forces, vice M'Gregor.

NAVAL APPOINTMENTS.—Surgeon Walter Dickson, M.D., (1848,) to the Firefly steamer, commissioned for service on the coast of Africa.

YEOMANRY APPOINTMENTS.—East Lothian Yeomanry Cavalry, James Kelly, M.D., to be surgeon.

APPOINTMENT.—Mr. Edward Charles Hulme, formerly student of Human and Comparative Anatomy in the Royal College of Surgeons, has just been elected one of the surgeons of the Blenheim-street Free Dispensary, in the vacancy occasioned by the resignation of Mr. T. M. Girdlestone.

OBITUARY.—On the 11th inst. Mr. W. Griffiths, aged 27, assistant to Mr. Richards, of Bedford-square. He destroyed himself by prussic acid. On the 7th inst., at Queen's-town, Ireland, Alexander Tayler, Esq., for forty-six years Surgeon, R.N. On the 12th instant, at Croydon, Joseph Neville, Esq., surgeon, aged 47.

THE CHOLERA has broken out in China, and the Governor of Macao has fallen its victim. It is on the decline in Alexandria,

but it has shown fresh vigour lately in Malta. Its ravages at Vera Cruz are not very extensive. It is much more violent at Jalapa, and a few cases have occurred at Tampico. It has almost disappeared from Havana, but still lingers in the country, where it is carrying off a considerable number of victims.

HUNTERIAN ORATOR.—Richard Anthony Stafford, Esq., surgeon to the St. Marylebone Infirmary, and a member of the Council of the Royal College of Surgeons, is the gentleman appointed to deliver the annual oration in the theatre of that Institution on the 14th of February next, in memory of the immortal genius of John Hunter.

LOCAL BOARDS OF HEALTH.—On Wednesday, the 25th inst., Local Boards of Health, under the Act 13 and 14 Victoria, cap. 108, are to be elected at Carlisle, Alnwick, Cardiff, Newcastle-under-Lyme, Exmouth, Darlington, Llanelly, Watford, Southampton, Berwick-upon-Tweed, Tewkesbury, Holbeach, Tormoham, Launceston, Burslem, and Reading.

A PARLIAMENTARY PAPER has just been published, which gives the expenses of the General Board of Health, to the 31st of March last, at 8,084*l.* 0s. 2½d., and the travelling and other expenses of the Commissioners in Lunacy for the year ending the 31st July, at 2,355*l.* 11s. 11d. Parliament, during its session, voted 8,000*l.* for the next year for each of these boards.

UPWARDS of 40*l.* was recently collected after a charity sermon for the Teignmouth and Dawlish General Dispensary and Marine Infirmary.

THE trial of Mr. Edwards, the surgeon charged with performing an operation to procure abortion, has been again postponed till the next sessions. Mr. Edwards is out on bail.

BRISTOL.—Several inhabitants of this city have raised a subscription to increase the efficiency of the Guinea-street Hospital. Mr. Eaton has contributed 5,000*l.*, and Mr. George Thomas 1,000*l.* for that purpose.

THE *North British Mail* states that a labouring man, having a wen in the neck of seven years growth, applied to a young Irish surgeon in the Cowcannons district, who removed it by operation, but in so doing wounded the carotid, the man bleeding to death in consequence. The operator has been arrested. The case is rather incredible, as any man in possession of common sense would have ligatured the bleeding artery.

CAVAN.—Dr. Creighton, a young medical man, a M.B. of Trinity College, formerly in practice in Dublin, lately committed a shocking murder at his residence near Cavan, on the person of a young female relative, and afterwards destroyed himself. Dr. Creighton had been withdrawn from practice by his friends, in consequence of his having manifested evidences of insanity for some time previously.

SUICIDE OF DR. BLAKE OF THE 20TH REGIMENT.—Dr. Blake has committed suicide, at Montreal, by cutting his throat with a razor. He survived some hours after committing the act, was quite collected, and acknowledged that he had fallen by his own hand. He had been indisposed for some days.

SINGULAR DEATH.—An inquest was recently held on a child, nine years of age, who died after presenting symptoms of poisoning, subsequent to eating some lemon peel which he had picked up in the street. Mr. Clapp, the surgeon in attendance, deposed, that the symptoms and *post-mortem* appearances resembled those caused by poisoning by a salt of copper; and John Raymond, shopman to Mr. Taggart, the tradesman opposite whose door the lemon-peel was found, stated, that he had used lemon-peel to clean the copper scales, and had afterwards thrown it into the street. The verdict of the jury was in accordance with these facts. It was stated, that another child had presented similar symptoms, but was recovering.

SINGULAR CASE.—On Saturday week, a man named Glover, having been thrown from his cart, was taken to the Royal Free Hospital. On examination by Mr. Jackson, the house-surgeon, only a few bruises on the back were discovered. On the Sunday he complained of pains, and was seen by the surgeon two or three times, who considered the injury he had received as slight, and that he would shortly be able to leave the hospital. On Monday, however, he suddenly expired, without any apparent dangerous symptoms. A *post-mortem* examination by Mr. Jackson showed that the neck had been broken by the fall. The extraordinary duration of life under the circumstances could only be accounted for by supposing that the bone had merely been fractured, and that the restlessness of the deceased had moved it from its position, thereby causing immediate death. An inquest was held on the body on Wednesday, and a verdict of "accidental death" returned.

HEALTH OF LONDON DURING THE WEEK.

THE deaths registered in the metropolitan districts in the week ending last Saturday were 929. Excluding last year, in which the rate of mortality was excessive from a violent epidemic, the deaths at present do not differ much from the average of the corresponding weeks in previous years. Last week there were 7 fatal cases of small-pox, one of which occurred to a woman who had turned 25 years; of measles there were 15; of scarlatina 38; of hooping-cough 20; and of croup 7. None of these complaints seem to prevail to an unusual extent at the present time. But typhus numbers 47 persons as its victims, and this disease now exhibits a slight increase. The registrar of Hoxton Old Town observes, that it has increased considerably in his district during the last month. The deaths from diarrhœa diminish, as is usual in this month, and last week they numbered 78. There were only 4 deaths from cholera; two of these happened to young persons, and two to men of somewhat advanced life.

MORTALITY TABLE.

Deaths in the week ending Saturday, Sept. 14, 1850.
(Metropolis.)

CAUSES OF DEATH.	Sept. 14.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	427	331	171	929	10935
SPECIFIED CAUSES	425	330	171	926	10885
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	164	50	24	238	4302
SPORADIC DISEASES:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	5	23	19	47	472
Tubercular Diseases	58	107	6	171	1748
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	44	27	24	95	1121
Diseases of the Heart and Blood-vessels	1	19	12	32	241
Diseases of the Lungs, and of the other Organs of Respiration	36	22	33	91	703
Diseases of the Stomach, Liver, and other Organs of Digestion	24	29	7	60	769
Diseases of the Kidneys, &c.	...	6	7	13	81
Childbirth, Diseases of the Uterus, &c.	...	8	1	9	71
Rheumatism, Diseases of the Bones, Joints, &c.	3	6	...	9	69
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	10
Malformations	5	...	...	5	23
Premature Birth and Debility	29	...	...	29	21
Atrophy	29	...	3	32	212
Age	...	...	24	24	463
Sudden	7	8	5	20	91
Violence, Privation, Cold, and Intemperance	20	25	6	51	297
Causes not Specified	2	1	...	3	59

The Deaths in the several Districts are as follow:—

DISTRICTS.	Population in 1841.	Sept. 14, 1850.	Sum of Ten Weeks.
London...	1948369	929	10935
West	301189	133	1464
North	376568	195	1871
Central...	374199	180	1961
East	393067	176	2446
South	503346	245	3193

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	23	Heart	28	Phthisis.....	117
Bronchitis	33	Hooping-cough ...	20	Pneumonia	40
Cholera	4	Hydrocephalus ...	26	Scarlatina	38
Childbirth	4	Influenza	...	Small-pox	7
Convulsions	33	Liver	4	Stomach	1
Diarrhœa	78	Lungs	5	Teething	10
Dropsy	17	Measles	15	Typhus	47
Erysipelas	5	Paralysis	17	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	725	463	262
Females	684	466	218
Total.....	1409	929	480

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·278	53·4	43·0	— 3·8	N.	N.	Miles. 95	0·00	Positive, and tension weak at each examination.
Monday	30·210	52·5	43·5	— 7·0	N.	N.	30	0·00	Nothing was shown throughout the day.
Tuesday.....	30·181	56·1	46·8	— 3·7	N.	E. & Calm	45	0·00	Nothing was shown throughout the day.
Wednesday.	30·144	56·1	47·4	— 3·8	Calm & E.	E.and E.N.E.	70	0·00	Nothing was shown throughout the day.
Thursday ...	30·126	57·5	46·1	— 2·4	E.N.E.	E.N.E.	60	0·00	Positive, and tension weak at 3 p.m.
Friday	30·140	55·5	43·1	— 4·3	E.N.E.	E.and E.N.E.	85	0·00	Nothing was shown throughout the day.
Saturday ...	30·117	56·1	42·1	— 3·6	N.E.	E.	75	0·00	Positive, and tension moderate during the afternoon.
Means ...	30·171	55·3	44·6	— 4·4	N.E.		SUM 460	SUM 0·00	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

THE following Publications have been received :—

On Corpulence, or Excess of Fat in the Human Body; its Relation to Chemistry and Physiology, its Bearing on other Diseases, and the Value of Human Life, and its Indications of Treatment; with an Appendix on Emaciation. By Thomas King Chambers, M.D., Gulstonian Lecturer for 1850, &c. &c. &c. Longmans. 1850.

A Practical Treatise on the Therapeutic Uses of Terebinthine Medicines; with Observations on Tubercular Consumption, Gout, Mineral Waters, &c. By Thomas Smith, M.D., &c. &c., formerly Senior Physician to the Leeds Public Dispensary, &c. Pp. 95. Longmans. London. 1850.

Report of the General Board of Health on the Epidemic Cholera of 1848 and 1849. Presented to both Houses of Parliament by command of Her Majesty. Pp. 157. With Map and several Tables.

On a New and Successful Treatment for Febrile and other Diseases, through the Medium of the Cutaneous Surface: Illustrated with Cases. By William Taylor, Surgeon to the Clerkenweli Infirmary, &c. &c. Pp. 170. Churchill. London. 1850.

Deafness Practically Illustrated; being an Exposition of Original Views as to the Nature, Causes, and Treatment, of the Diseases of the Ear. By James Yearsley, Surgeon-Aurist to Her late Majesty the Queen Dowager, &c. &c. &c. Third Edition. Pp. 244. Churchill and Highley. London. 1850.

Mr. Hudson's Evidence on the Trial of the Cause—Richardson *versus* Wodson, York Summer Assizes, 1850. Edited by a Barrister. Pp. 45. London: Hearne. 1850.

The Monthly Journal of Homœopathy. For September, 1850. London: Piper and Co.

American Journal and Library of Dental Science. For April, 1850. Edited by Drs. Harris, Westcott, and Maynard. Baltimore: Armstrong and Berry; Philadelphia: Lindsay and Blakiston.

Appendices to the Report of the General Board of Health on the Epidemic Cholera of 1848 and 1849. Presented to both Houses of Parliament by command of Her Majesty.

Appendix A. By Dr. Sutherland. Pp. 164.

Appendix B. By Mr. Grainger. Pp. 201.

COMMUNICATIONS have been received from Dr. BARKER, of Dumfries, "Further Remarks on his Case of Premature Birth;" Mr. OGILVIE, of Ridgway-house; Mr. HENRY BATEMAN, of Islington-green; Mr. TERRY, of Leyburn, on "Sterility;" Dr. LETHEBY, of the London Hospital, Lecture XX., on the "Chemistry of the Poisons;" Dr. ROE, of Plymouth, on the "Cholera in Plymouth and its Nelghbourhood, in 1849." Part III., with two woodcuts; TYRO, Guy's; P. P., Croydon; H., the Clarendon; Q IN THE CORNER; N. P. C.; INQUIRER, "Inquiries on Ventilation;" C. B., a Tourist, "Inquiries on Quarantine;" H., Guys; N. B., Leeds; AN OLD SUBSCRIBER; H., Woolwich; INQUIRER, "On Kousso;" A CONSTANT READER; Dr. JONES, of Washington.

We regret we are obliged to delay the publication of Dr. Barker's further remarks on his "Case of Premature Birth;" Mr. Cowen's, of Bewdley, "Singular Case of Premature Maturation of the Vaccine Vesicle;" and Mr. Terry's, of Leyburn, "Observations on Mr. Burman's and M. D.'s Cases of Hypospadias."

We have received, too late for publication, Letters from SPECTATOR on the "Medical and Chirurgical Society;" Mr. HAKES, of Liverpool, on "Hypospadias;" Mr. HAWKER, of Edward-street, Portman-square, on "Self-supporting Dispensaries," in reply to "————," in our last Number.

Mr. Ogilvie, of Ridgway House.—We fear the MS. is mislaid. We are sure, however, no one has read it—certainly no such person as he supposes.

Tyro, Guy's.—Alkaloids are generally written with the termination *a*, as strychnia, morphia, quina, &c.; vegetable acids with the term *ic*, meconic, tannic, gallic, &c.; neutral principles *in* or *ine*, as salacine, piperin, cantharidine, &c.

H., the Ctarendon.—Two excellent authorities, Brodie and Copeland, recommend tying as the best operation in hæmorrhoids.

P. P., Croydon.—The clamps used in Dublin are the invention, we believe, of Mr. Carte. The pad is of India-rubber. There has not been much experience of the operation in England.

Q. in the Corner.—We must not defraud the trunk makers. Our libraries are not so much enriched by such pictures as other places;—"Non tam refertæ bibliothecæ quam cloacæ."

N. P. C.—Dean Swift marked his porter bottles "poison;" his wine, "rank poison;" and his brandy, "deadly poison." An expedient to prevent his servants drinking what he termed their "lethal contents." Our correspondent may take a hint.

A Constant Reader, Gatignani's, shall have his wishes complied with. We would recommend him to read Mr. Pagett's Lectures and the Astley Cooper Prize, by Mr. Wharton Jones.

Inquirer.—Dr. Arnott's system of ventilation, as used at the Brompton Hospital, would be useful. The uniform temperature of this Hospital is 65° winter and summer.

C.B., a Tourist.—Quarantine regulations are in full force in Italian ports, varying from a fortnight to three weeks, in regard to vessels coming from places where cholera exists. Vessels from Malta are not allowed to enter into some of these ports, so satisfied are the authorities of the contagiousness or transferability of cholera from port to port. In London our Board of Health consider it not contagious.

H., Guy's.—The best work on Iodine is Dorvault. He thinks iodide o potassium as specific in tertiary as mercury in the other forms of syphilis. He gives the credit of the discovery to Wallis, of Dublin.

N. B., Leeds.—Mackenzie, of Glasgow, lately removed a hydatid from the anterior chamber. The patient, the day after the operation, saw quite well, and left the hospital in a week. Giving mercury before operation is discountenanced by many practitioners.

An Old Subscriber's hints shall not be lost sight of. Lawyers have the making of the laws, and hence it is that they are never forgotten when good things are to be given away. We fear, if the Minister were sick, and felt the use of the doctor, we should probably have a repetition of the old tale,—

> "The Devil was sick, the Devil a saint would be;
> The Devil got well, the Devil a saint was he."

We don't mean that Sir George is exactly the father of lies, but certainly he generally plays the devil when he legislates for the doctors.

H., Woolwich.—The proportion of carbonic acid in the air is very small; 10,000 volumes, according to Saussure, contain 4·15 parts. 2. The discharge of sewage matter, according to the proposed plan, is said not to be low enough down the river to get to sea.

Kousso.—See our Paris correspondent's letter, August 10.

A Constant Reader wishes to know how *Hydroferrocyanate of Potash and Urea,* so useful in ague, is procured, and what is its dose. M. Baud is perhaps the best authority.

Mr. Bateman, of Istington Green, will receive a proof of his "Case of Operation on Hare-lip four hours after Birth." The paper had been unfortunately mislaid at the printing office.

Dr. Sheridan Muspratt's proof was returned too late for this week's publication.

Mr. Atkyn's, of Dorset-crescent.—We never publish communications that we are aware have been sent to contemporary journals. In the present case it is unnecessary to depart from our rule, especially as a meeting of the Protection Society will take place on the 20th inst., at which Mr. Atkyns can demand an explanation of the circumstances of which he complains. We observe that Mr. Atkyns is a member of the Council of the new and rival office.

Dr. Jones' letter arrived too late for insertion this week.

St. George's Hospital Medical School, London.

The Session 1850-51 will commence on TUESDAY, OCTOBER 1st, when the Scholarships and Prizes awarded during the past year will be presented by Sir BENJAMIN BRODIE, Bart.

DESCRIPTIVE AND SURGICAL ANATOMY—Mr. Prescott Hewett and Mr. Pollock.
PHYSIOLOGY AND GENERAL ANATOMY—Mr. Athol Johnson.
PRACTICAL ANATOMY—Mr. Pollock, Mr. Athol Johnson, Mr. Ogle, and Mr. Hornidge.
CHEMISTRY—Mr. Noad.
PRACTICAL CHEMISTRY—Mr. Noad.
MATERIA MEDICA—Dr. Pitman.
MEDICINE—Dr. Nairne and Dr. Page.
SURGERY—Mr. Tatum.
MIDWIFERY—Dr. Robert Lee, F.R.S.
MEDICAL JURISPRUDENCE—Dr. Fuller and Mr. H. C. Johnson.
BOTANY—Mr. Henfrey, F.L.S.

Clinical Lectures on Medicine and Surgery are given by the Physicians and Surgeons of the Hospital during the Winter and Summer Sessions.

Practical Chemistry is taught in the Laboratory of the School.

Practical Pharmacy, under the superintendence of the Apothecary of the Hospital.

The SUMMER SESSION will commence MAY 1st.

SCHOLARSHIPS, PRIZES, ETC.

At the end of the Summer Session, Examinations will be held for two Scholarships, of the value respectively of £40 and £20 per annum, each tenable for two years.

Examinations of all the classes for Prizes and Certificates of Merit also take place, and Prizes given by Sir Benjamin Brodie, Dr. Chambers, and Dr. Seymour, are awarded.

Some of the Lecturers and other gentlemen connected with the Hospital receive students to reside with them.

Further information may be obtained from any of the Lecturers; or from the Apothecary of the Hospital, who is authorised to enter the names of students.

Theatre of Anatomy and Medicine,

adjoining St. George's Hospital, 1, GROSVENOR-PLACE.
SESSION 1850—51.

INTRODUCTORY ADDRESS—Dr. Lankester, F.R.S., October 1st, at Half-past Two.
ANATOMY and PHYSIOLOGY—Mr. Lane, Dr. W. V. Pettigrew, and Mr. G. E. Blenkins.
DESCRIPTIVE and SURGICAL ANATOMY—Mr. G. E. Blenkins and Mr. J. R. Lane.
PRACTICAL ANATOMY—Mr. H. Bullock and Mr. F. Godrich.
CHEMISTRY—Mr. Rodgers.
MEDICINE—Dr. Theophilus Thompson, F.R.S., and Dr. J. Bampfylde Daniell.
SURGERY—Mr. Pilcher.
BOTANY—Dr. Lankester, F.R.S., F.L.S.
PRACTICAL CHEMISTRY—Mr. Rodgers.
MATERIA MEDICA—Dr. Lankester, F.R.S., F.L.S.
MIDWIFERY—Mr. Bloxam.
MEDICAL JURISPRUDENCE—Mr. Warder.

Fee, entitling attendance upon all Lectures to qualify for Diplomas at the various Medical Boards, 42 Guineas.

For further particulars, apply at the School, No. 1, Grosvenor-place, or to the Honorary Secretary, Dr. W. V. Pettigrew 7, Chester-street, Grosvenor-place.

Hunterian School of Medicine.

1, BEDFORD-STREET, BEDFORD-SQUARE:
ESTABLISHED 1822 by the late Mr. DERMOTT.

The Winter Session will commence OCTOBER 1, with an INTRODUCTORY ADDRESS by Dr. ALDIS, at Three p.m.

MEDICINE—Dr. Aldis, F.R.C.P., One Session, £3 3s.
SURGERY—Mr. Evans Riadore ditto
ANATOMY and PHYSIOLOGY—Mr. John Chippendale, F.R.C.S., ditto.
PRACTICAL ANATOMY—Mr. Chance, F.R.C.S., £4 4s.
CHEMISTRY—Mr. J. M. Ashley, £4.

The whole of the Lectures required for passing the Royal College of Surgeons of England and Apothecaries' Hall, 32 Guineas; including Hospital Practice, 57 Guineas.

The Winter Courses will be continued by the present Lecturers.

Apply at 1, Chester-terrace, Chester-square; or 28, Bedford-square.

London Hospital Medical School.

The Winter Session will commence on TUESDAY, OCTOBER 1, 1850, with an Introductory Lecture by Mr. N. WARD, at Half-past Two p.m.

MEDICINE—Dr. Little.
SURGERY—Mr. Luke and Mr. Curling, F.R.S.
DESCRIPTIVE AND SURGICAL ANATOMY—Mr. Adams.
GENERAL ANATOMY AND PHYSIOLOGY—Dr. Carpenter, F.R.S.
PRACTICAL ANATOMY—Mr. N. Ward and Mr. Brown.
CHEMISTRY—Dr. Letheby.
DENTAL SURGERY—Mr. Craigie.
CLINICAL LECTURES—By the Physicians and Surgeons.

General Fee to the Lectures, £50; to the Hospital Practice and Lectures, 84 Guineas, payable in two instalments of 42 Guineas each, at the commencement of the two first Winter Sessions.

For further information, prospectuses, &c., apply to the Hon. Secretary to the School, or the Theatre Beadle.

Westminster Hospital School of Medicine.

SESSION 1850—51.

The Lectures will commence on TUESDAY, 1st OCTOBER, at Four p.m., with an Introductory Address by Mr. BENJAMIN PHILLIPS, F.R.S.

ANATOMY and PHYSIOLOGY.—Mr. Hillman and Mr. Brooke, F.R.S.
DESCRIPTIVE and SURGICAL ANATOMY.—Mr. Holthouse.
ANATOMICAL DEMONSTRATIONS.—Mr. Burford Norman.
CHEMISTRY.—Mr. Lewis, M.A.
MEDICINE.—Dr. Hamilton Roe and Dr. Basham.
SURGERY.—Mr. Phillips, F.R.S., and Mr. Holt.
MIDWIFERY and DISEASES of WOMEN.—Dr. Frederic Blrd.
MATERIA MEDICA.—Dr. Basham.
FORENSIC MEDICINE.—Dr. Fincham and Dr. Tanner.
BOTANY.—Dr. Radcliffe.
DENTAL SURGERY.—Mr. Clendon.
HOSPITAL PRACTICE daily, from Half-past Twelve to Two o'Clock.

CLINICAL LECTURES will be delivered regularly, twice a week, by the Physicians and Surgeons, those on Midwifery by Dr. Merriman and Mr. Greenhalgh.

General Fee to the Lectures required by the College and Hall, Forty Guineas.

Two Matriculation Scholarships will be instituted, the holders of which will be admitted, without fee, to the Lectures and Hospital Practice required by the College of Surgeons and the Society of Apothecaries. The examination for these Scholarships will be held on TUESDAY, SEPTEMBER 24. It has also been determined to award one Scholarship, of the annual value of £20, tenable for three years, to the student who shall most distinguish himself in a general examination at the end of the Session.

Further particulars may be obtained on application to the Lecturers, or to F. J. Wilson, Secretary of the Westminster Hospital.

F. J. WILSON, Secretary of the Westminster Hospital.

St. Thomas's Medical Session,

The Introductory Address will be delivered by Dr. GREGORY, on TUESDAY, 1st OCTOBER, 1850, at Eight o'Clock P.M.

Gentlemen have the option of paying £40 for the first year, a similar sum for the second, and £10 for each succeeding year; or of making special entries to Lectures, or to Hospital Practice.

SCHOLARSHIPS AND PRIZES FOR 1850-51.

A SCHOLARSHIP of £20, for the best voluntary Classical and Mathematical Examination, at the commencement of the Student's Hospital attendance.

TWO SCHOLARSHIPS, for first year's men, each of the value of £20 a-year, and tenable for three years.

The two House Surgeons, the twelve Dressers, and the Resident Accoucheur, will be selected according to merit; and provided with Rooms and Commons in the Hospital, free of expense.

THE PRESIDENT'S PRIZES. The first, 10 Gs. The second, 5 Gs.

TWO PRIZES for CLINICAL MEDICINE, and PRIZES and CERTIFICATES of HONOUR, in each of the different Classes.

Mr. NEWMAN SMITH'S PRIZE, £5. Mr. GEORGE VAUGHAN'S PRIZE, the CHESELDEN MEDAL.

Dr. ROOT'S PRIZES. 10 Gs. ONE of the GOVERNORS, a PRIZE of 5 Gs.

THE TREASURER'S PRIZES. The first, a Gold Medal. The second 5 Gs.

The TREASURER'S PRIZE, to be awarded in 1851. One Hundred Pounds for the best Essay, including Original Researches on Organic Chemistry, in its relation to Pathology and Practical Medicine. The special subject of the Essay is, "On the Chemical and Physiological action of Mercurial Preparations."

MEDICAL OFFICERS AND LECTURERS.

Dr. Roots, Consulting Physician; Dr. Barker, Dr. Leeson, Dr. Risdon Bennett, Mr. Green, Mr. South, Mr. Mackmurdo, Dr. Goolden, Dr. Cohen, Dr. Peacock, Mr. Solly, Mr. Le Gros Clark, Mr. Dixon, Dr. Waller, Mr. Simon, Dr. Gregory, Dr. E. Meryon, Mr. Grainger, Mr. Saunders, Mr. Rainey, Mr. G. Luxford, Mr. Adams, and Mr. Bristowe.

COLLEGIATE ESTABLISHMENT.

Under the direction of the Treasurer and Almoners of the Hospital, houses have been fitted up as residences for the Students, and a College Hall, where Commons will be provided.

To enter, or to obtain further information, apply to G. Mackmurdo, F.R.S., Dean of the Medical School; or to Mr. Whitfield Resident Medical Officer, at St. Thomas's Hospital.

The Middlesex Hospital School of Medicine.

The Winter Session will Commence on TUESDAY, OCTOBER 1, 1850, with an Introductory Lecture, by Dr. Goodfellow, at 1 o'clock.

The Hospital receives 285 in-patients, and contains wards for cancer, syphilis, and uterine disease.

The annual number of out-patients is 10,000.

Clinical Clerks and Dressers are elected from the pupils without additional fee. The Clinical Clerk and Dresser of the week dine in the board-room.

The House Surgeons are selected half-yearly from the Dressers, and are provided with board and residence in the Hospital free of expense.

Lectures are given on every branch of medical science.

Fee for 18 months' medical, and three years' surgical practice, £30.

Fee for the Hospital Practice and Lectures required by the College of Surgeons and Apothecaries' Company, £75. This sum may be paid by instalments of—£30 at the beginning of the first session, £30 at the beginning of the second session, and £15 at the beginning of the third session.

For further information, prospectuses, &c., apply to Mr. De Morgan Treasurer to the School; or to Mr. Corfe, the Apothecary; or to Mr. Shedden, the Secretary to the Hospital.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 28.

ADDRESS TO THE MEDICAL STUDENTS OF LONDON.

"And beshrew our soul,
But we do love the favour and the form
Of this most fair occasion."—King John.

The session of medical study for the year 1850-51 is now about to commence; the college and hospital professors have their lectures prepared; students are arriving from all parts of the country, and we cheerfully lay before them in our present number a full programme of the various courses of instruction provided for them in the different schools of this great metropolis. We also avail ourselves of this anniversary *réunion* to address a few words of encouragement and advice to those who are about to enter upon paths which we have ourselves trodden with blithesome footsteps, and which may be regarded as so many avenues opening into the future prosperity of life.

With a light heart the first-year's student arrives in London, just emancipated from the thraldom of an old-fashioned apprenticeship, or it may be from the discipline of college; and albeit he may cast many "a longing, lingering look behind" on the scenes of his boyhood, and sigh to think of the comforts of his home—and it may be of the "maid of his love"—yet will his mind infallibly be excited by the novelty of his position. The museums, hospitals, and lecture-rooms; the crowd of new companions that will throng around him on every side; his curiosity to see and hear the most celebrated of our medical professors:—these objects will naturally enough lead to a diversity of thought, which may for awhile produce some little bewilderment, in the midst of which, if he begin seriously to consider the chart of knowledge through which he is expected to travel in order that he may obtain the information that will be required of him, he will find his heart sink within him, at the prospective difficulties he has to encounter. "How," he will ask himself, "can it be possible to learn so much? How can such a vast variety of subjects be grappled with and retained in the memory?" What a cloud of mystery seems to obscure the threshold of the temple! But be of good cheer. It is most encouraging to observe how much may be achieved gradually—by little and little—nay, by a very few hours of study steadily followed up and daily repeated. The error of many young students is, that they often begin by aiming at too much; they would fain go too fast; they fancy the citadel of science is to be vanquished by storm, instead of being taken possession of gradually and quietly. The attack is too hot to last; on a sudden they slacken their labours; and, during an unwise intermission, lose the 'vantage ground they had already obtained. This is bad generalship. It is almost incredible how quickly the much that may be learned may be forgotten:—

"Love flows like the Solway, but ebbs like its tide."

So does knowledge. It flows into the mind slowly, and sometimes by painful degrees; and when attention, like a sleepy sentinel, forgets to guard its post, its stream ebbs away with inconceivable rapidity. There are, however, some students who will argue, that the idleness of to-day may be made up for by the industry of to-morrow—that the deficiencies of one session may be made good by extra application during another. Be not deceived! The ground that is lost cannot easily be recovered. It is by studying systematically a given number of hour *de die in diem*, that the information required to make an accomplished surgeon or physician alone can be obtained. The soil must be tilled slowly and carefully to yield a sure and abundant harvest. If the student will only from the beginning pursue his studies regularly—be punctual in his attendance in the lecture-room and hospital—if he will follow up his observations by reading methodically:—he will not towards the end of his studentship find it necessary to harass his mind and impair his health by inordinate application and midnight study. To return home, even with his long-wished-for diploma in his pocket, with cheeks blanched by the unhealthiness of late hours, and a "brow sicklied o'er with the pale cast of thought," is a bad sign; it indicates an amount of negligence or dissipation in the early part of the season, the reparation of which has demanded a sacrifice which the strength of the constitution has not been able to sustain. Besides which, a healthful cheerfulness during study facilitates the acquisition of knowledge and invigorates the faculties of the mind. Nothing can be well learned in a hurry; galloping over the course only jades the memory and prostrates its energies. Again: some students fancy they can recover lost time by having recourse to a grinder, as if knowledge could be crammed into the human mind like food into the crop of a turkey. We do not object to what is called "*grinding*,"—the Socratic mode of teaching by questions is, for aught we know to the contrary, excellent; but then, it should be adopted soon, and continued through the whole course of study, instead of being had recourse to as a *dernier ressort* at the eleventh hour. It is then the idle student goes to his grinder, like a confessional to his priest, flattering himself that he will absolve him from his past errors, and some how or other contrive to ferry him through his difficulties. Here, again, he deceives himself; for, supposing his lucky star does protect him, and that he does escape being "plucked:"—after all his examination and the triumph he thinks he has achieved, what is his position? Does he really know his profession? The public now-a-days, both in town and country, is sufficiently intelligent to distinguish the competent from the incompetent, the skilful from the unskilful, medical practitioner. And here we would fain impress most emphatically upon the mind of every student, that the great object of his attending our medical schools is not simply to pass an examination at the Hall, College, or University. He must look beyond this. He must qualify himself to practise his profession with knowledge and ability: he must be ever in readiness to be tried by a severer tribunal than the one impending; for when the details of his examination have long since passed from out his mind, he will find himself in positions of responsibility wherein he must rely solely on his own resources. If, then, through his incompetency a fellow-creature become a cripple through life; or if through his ignorance at the bed-side a single human life should be sacrificed, how heavy would be the penalty that must await him; yet such may be the irretrievably bitter consequences of the misspent hours of a student's life. To pass through the ordeal of an academical examination, however, with credit and honour is of the highest importance; it soon becomes whispered abroad, the professors regard such young men with interest, and they commence their professional career under the happiest auspices.

The study of medicine has to the beginner its difficulties. He will, in the first instance, be puzzled to understand many technical terms, which he may often feel inclined to pass over

with a negligent guess at their meaning. This is bad policy; for it is leaving so many stumbling blocks in the way of his future progress. It is of the utmost consequence not only to understand the meaning of every word, but to trace its derivation, which will always point out its proper application. Words, then, become the helpmate of memory. Here, also, we may remark that the student, in the course of his reading, should pay attention to the literary construction of the passages before him; for in after life he may be called upon to correspond officially and publicly on many occasions, when an illiterate expression or inelegance of style may seriously injure his reputation. Furthermore, he ought to translate every Greek or Latin sentence he may incidentally meet with; for experience shows that these languages are easily forgotten, and it is a sad sacrifice of time in the last year of study to be under the necessity of going back to the humanity class, or, which is the same thing, to be obliged to engage a private tutor. Hence, it is well to keep up the knowledge of the classics by reading some portions of them daily. The choice of books, in the first year of study, is a matter of great importance. Upon this point the student should consult and be advised by his Professor; and when selected we recommend him not to change his books capriciously, or fancy that one elementary work is better than another. He should adhere to his original text-book, and not ramble about in search of others; indeed, he ought in the beginning of his studies to confine his attention to the subjects of the daily lectures, or the cases which he may have seen in hospital. He must not object to go over and over again the same ground. The multiplication table was never learned by reading it once or twice over, or the problems of Euclid by simple inspection. Sir Edward Sugden, who attained so much fame for his learning and eloquence at the bar, when asked to explain the secret of his success, answered, "I resolved, when beginning to read upon law, to make everything I acquired perfectly my own, and never go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but at the end of twelve months my knowledge was as fresh as the day it was acquired, while theirs had glided away from recollection." In the same way, the principles and elementary facts of medical science cannot be too deliberately and strongly impressed upon the mind. The whole secret of grinding consists in making the student reiterate the same thing until he remembers it; and the only advantage the grinder seems to possess over the book is, that he is a talking, the other a silent monitor. His manner of speaking and way of explanation is more impressive than reading to an inattentive mind; for, after all, it is an affair only of attention. The schoolboy learns his Greek and Latin grammar by recurring constantly to the same lesson; going over again the same rules:—he continues, indeed, conning over the same book until its very leaves upbraid his dulness by turning round upon him, and becoming dog-eared. The same kind of application and perseverance is absolutely necessary in order to learn anatomy, physiology, chemistry, materia medica, and the collateral branches of medical science.

Some difference of opinion prevails respecting the expediency of taking notes. We are inclined to think, that when very much extended, the plan is a bad one; because the student then is apt to rely upon them rather than upon the actual exercise of his memory. Nevertheless, short notes, frequently consulted, may be useful. Another point of doubt has arisen respecting the competition for prizes. Nothing can be more honourable than for a young student to be crowned with laurels;—his own vanity cannot fail to be infinitely flattered thereby, and his friends at a distance will also be delighted. But we must not mislead ourselves. Economy of time and industry is of great importance to the young student; he cannot afford to concentrate all his energies and devote all his attention to any exclusive subject. In competing for a prize his attention is drawn from all other pursuits; and we cannot help thinking, however successful he may be, that too often he will have earned his victory at the expense of other studies which ought not to have been neglected. It is, indeed, an evil for medical students, before completing their education, to take up any one subject of study as a specialty. This kind of favouritism will necessarily lead to only one point of the compass, and he will remain ignorant of many others with which he should be familiar. There are some young men, however, who commence life with an ardent desire for personal distinction—an intuitive notion of self-idolatry—the idea of the love of fame with them resembles a brilliant but delusive meteor, which irradiates only for awhile the distant horizon of existence. The experience of the world will soon dispel this vision. They then must fall back upon the stern realities of life, and will discover that it is upon their success in their profession only that they must depend for their very subsistence. We have known some youths of an imaginative turn of mind fancy themselves poets;—nay, invoke the Muses in the dissecting-room, and write verses while they were dissecting blood-vessels. There are very few young men of any talent and education who cannot string together a score or two of rhymes, aye, and write good poetry, too; but it is a grievous loss of time to supersede more serious study by so unprofitable an occupation. It is better any day to be a good physician than an indifferent poet. In walking the hospitals, therefore, eschew the Muses. Others, again, of a metaphysical turn of mind, rush headlong into recondite and abstruse disquisitions, and, before they are well acquainted with the most elementary facts of science, flounder about in search of shrimp-like abstractions and subtleties. These are the unfledged philosophers of the schools. They pretend to be very profound, but when they have gone out of their depth, and taken a dive into the mud, they do not rise to the surface any wiser than their fellow-students. Abjure, we entreat you, all such shadowy speculations, and ascertain what are the truths of science before endeavouring to unravel their mysteries.

Upon his arrival in London, the first-year's student will find himself in a new sphere of action. Where shall he live? What shall he do? Who will become his friends and future companions? The moral position of the student during the session that is now about to open must needs be a subject of painful anxiety to those parents who know well that the time has arrived when it is fitting and necessary that even their favourite son shall face the temptations, and begin to take his share in the great business of the world. What will then be his conduct? Will it reflect honour on them, and be creditable to himself? or will some evil genius throw its malignant influence around him, and seduce him from the paths of rectitude in those of idleness and dissipation, where he will squander his means, revel in vice and folly, blur his family escutcheon, and bring gray hairs with sorrow to the grave? Will he escape, uncontaminated, the snares which notoriously lie in wait for the youthful traveller when he has left his parental hearth, and is wandering through the highways and byways—the broad streets and narrow alleys—of a great and over-

peopled city, in which wealth and poverty, luxury and starvation, virtue and vice, seem huddled together in striking and revolting contrast? How will he return to the home of his fathers? These are questions of deep and solemn import which at this moment make the life-blood quiver in many a mother's heart. It behoves us now, therefore, to view the student's life under its moral aspect. And, first, it is of consequence that his place of residence should be judiciously chosen; and there cannot be a question that the best policy which can be adopted will be for him to board in a respectable private family, or, if possible, in the house of a physician or surgeon, who will superintend his studies, and whose society will always be instructive and bear upon the great object he has in contemplation. Lodgings, the best of them, are dreary solitudes, which the brightest fire of a winter's night will hardly cheer up into anything like domestic comfort. "I am never domesticated," said Robert Southey, "in lodgings; the hearth is unhallowed; the Penates do not abide there." The student, with all his home associations fresh about him, feels this, and soon leaves his solitary fire-side to the gaieties of the theatre, the licentiousness of the tavern, or the society of new acquaintances, with whom he is tempted to smoke cigars, drink punch, and tell merry stories—"wrong, but pleasant"—until the hour arrives when Hamlet's ghost, in the shape of a policeman in blue armour, "sniffs the morning air," and, meeting him in the deserted street, perhaps "marshals him the way that he should go." Habits of irregularity and intemperance are hereby engendered which are incompatible with study, and which never would occur or be tolerated in a private family. But, however important for his personal comfort the place of his abode may be, the choice of his new companions is of infinitely greater consequence to his future happiness, for this is the initiatory step which will govern for good or for evil all his future movements. The purest stream may become contaminated by running through poisoned ores. Vicious habits are more contagious than the leprosy of old, and disfigure the mind more than that Eastern plague ever did the body. Once infected there is no escape. Beware, therefore, of new acquaintances. The lustre of a young man's honour soon becomes tarnished in an impure atmosphere. Use caution and discretion in the selection of your friends, and cultivate an intimacy only with those who are of studious and temperate habits, and who can, directly or indirectly, in conversation, suggest new ideas, or impart information. For the mind, even in its hours of recreation, should be as active as the swallow on its wing. There are many young men who exhibit no apparent or outward vices, whose society, nevertheless, it would be well to avoid. Such are the following:—We would avoid those who are gay, thoughtless, and prodigal, who lavish their money foolishly away, and whose lodging-house cupboards are miniature wine stores and gin palaces. We would avoid fashionably-dressed youths, who profess to understand and be fond of horses and dogs, and the mysteries of the race-course and the ring, and who leave the hospital for the livery-stable, to associate with grooms, pugilists, horse breakers, and dog-fanciers. We would avoid those who delight in billiard-playing, whist, *écarté*, and games of chance, their proficiency in which has been purchased at the expense of their professional education. We would avoid men who habitually haunt the theatre and the tavern, who "vex the drowsy ear of night" with their uproarious mirth, and go forth to their class-room next morning with faces pale and cadaverous, and suffused with the fumes of the previous night's debauch. We have, too, a prejudice against any young man whom we may meet with moustache on his lip, and "imperial" on his chin, elbowing his way along the street with a student's cap upon his head and a cigar reeking in his mouth. The habit of smoking in early life is ungentlemanlike, and suggests the suspicion that such youths are addicted to other vices. Their cigar is the symbol, in our eyes, of the tap-room and the wine-cellar. We would avoid associating with men who are much richer than ourselves, for we could not prudently compete with them in their expenses, and it should always be our pride never to be ashamed of an honourable poverty. We would, also, for our own peace of mind, avoid over-talkative men—everlasting chatterers—the magpies of debating societies. We know many such, but they have no health in them. "There is nothing tires one more," says old Feltham, "than words when they clatter like a loose window shaken by the wind. A talkative fellow may be compared to an unbraced drum, which beats a wise man out of his wits. Surely Nature did not guard the tongue with a double fence of teeth and lips, without meaning that it should not move too nimbly." There are many other descriptions of men we would avoid, and there is much more advice respecting the moralities of life that we could give. What says the immortal Shakspere? "Let not the creaking of shoes, or the rustling of silks, betray thy poor heart to woman; keep thy foot out of brothels, thy hand out of plackets, thy pen from lenders' books, and defy the foul fiend."

The more advanced student, on his return to the Modern Babylon, will, we presume, be acquainted with its localities, its handsome squares, wide streets, and many of its narrow, by-lanes; he will know his "whereabouts," having already, in all probability, "defied the foul fiend." The present session we will suppose to be his last. He must therefore return with increased assiduity to his studies. It is now that he will find frequent self-examination of the greatest assistance. He should ascertain upon what points he is deficient, and sift the elements of his learning, in order to separate the ore from the dross. He must endeavour so to arrange his capital as to have it at command, and be ever ready, as it were, to give change for the smallest coin. In other words, he should be prepared to give every explanation required upon minor elementary points, which are often overlooked as insignificant for those which, on account of their difficulty, appear to be of greater consequence. We have known a candidate for a physician's degree capable of describing with great accuracy the nervous and arterial systems in detail, and their relations with the minutest points of relative anatomy, who nevertheless had not thought of asking himself how many teeth he had in his head. In chemistry, too, men will often perplex themselves to learn and remember the most complicated theories of chemical action, and at the same time neglect to observe and carry in their minds the characteristic properties of the most simple substances. The error of the advanced student, as he approaches the first trial scene of anxiety he has ever experienced is, that he does not ask himself whether he *really* understands this or that subject, but puzzles himself to know how divers questions may be met and parried, and by what clever *ruse* he may, like a fox, escape through some hole and corner, and evade being caught in the trap of error. His idea of the character of the examination which awaits him is often erroneous. He is apt to entertain an unfitful fancy that the examiners will, like the Spanish inquisitors of old, put him to the torture of cross-examination, only to convict him of something he does not know, or

may have forgotten. The reverse is the fact. Their object is to ascertain whether he has thoroughly, and in a comprehensive manner, qualified himself to be a competent practitioner; and whether they will be justified in giving him his diploma, or passport into the profession. The well-informed candidate need anticipate no difficulty. He should go up with a cheerful countenance, and not be flurried by the notion that any undue advantage will be taken of an inadvertent mistake. The consciousness of having spent his whole term of study, session after session, diligently and studiously, will inspire him with an internal feeling of confidence, which will enable him to answer questions with presence of mind. His faculties will not be paralysed; his knowledge will not be frightened out of him by the sight of the professors in their silken robes. We have known young men turn pale and sick in the waiting-room; and we believe that some have, like Sir Walter Raleigh, faced death on the scaffold with more courage than many of these youths have faced the Court of Examiners of the College of Surgeons. Truly, this lack of self-possession is absurd, and must originate in the consciousness of time misspent, and in a sense of great self-deficiency; for, be it observed, no man is rejected for being unable to answer some few unimportant and collateral questions. The Examiners have a sacred duty to perform, which we know they discharge conscientiously, and always towards the student with kind and liberal feelings. They discern clearly the distinction between mistakes arising from nervousness or lapse of memory, and positive ignorance and blundering; they soon discover whether or not the candidate has studied his profession with diligence; whether he has availed himself of the advantages which have been placed at his disposal, or idled away his time in vain and unprofitable pursuits; they, too, have had, in many instances, an eye upon his reputed moral character, and his conduct during the whole term of his studentship; and we are satisfied that they exercise a fair and wise discrimination, and pronounce, on all occasions a verdict that is just and unimpeachable. No man need be afraid of passing the Hall, the College of Surgeons, or the Universities, who is qualified to practise his profession. It is upon such principles only that the professors, who are the guardians of public health, can protect the welfare of society, and uphold the reputation and honour of the medical schools over which they preside.

To conclude. We congratulate medical students, young and old, who are now arriving in this metropolis to enter on the session 1850-1. They have our best and most cordial good wishes, and they will always find the "Medical Times" a steady and zealous advocate of their interests. The advice we have felt ourselves called upon to give upon "this most fair occasion," they will, we trust, receive in the spirit with which it is tendered; and we would fain hope, that when many of those, who are now only students, have attained an honourable distinction in their profession, they will look back with satisfaction and pleasure to the present period, and that every day of the ensuing session may be so passed as to enable them to verify hereafter the prediction of Æneas:

"Forsan et hæc olim meminisse juvabit."

Dr. Wilson, of Labuan, died lately from the effects of a sunstroke.

A New Surgical Hospital is about to be erected in Edinburgh, on the vacant ground between the Infirmary and the High-school, the Royal Infirmary being inadequate for the accommodation of the numerous patients. It is to be plain in its design, and fitted up interiorly with every requisite convenience.

RULES AND REGULATIONS
OF
EXAMINING MEDICAL BODIES
IN
ENGLAND, SCOTLAND, AND IRELAND.

ENGLAND.

UNIVERSITY OF OXFORD.

Full term is understood to begin on the first day of the week after the congregation has been held; so that, if the congregation be held on the Monday, the Sunday after is considered the first day of full term.

According to the lately-altered statute respecting medical degrees, a candidate for the degree of bachelor in medicine, before he can be admitted to examination for that degree, must have kept four whole years, or sixteen terms, in the University, in like manner as is required by candidates for a degree in arts; (a) must have passed the examination for the degree of bachelor in arts; and, subsequently to that examination, must have studied medicine during three whole years, or twelve terms; and must also have completed seven years, or twenty-eight terms, from his matriculation.

The medical examination takes place only once in the course of the year, namely, in the second week of full Trinity term, commencing usually on the *second Tuesday* after Trinity Sunday. The candidates are examined, principally *vivâ voce*, but partly in writing, in the theory and practice of medicine, in anatomy, physiology, pathology, and materia medica; and also in chemistry and botany, as far as they elucidate the art of medicine. He is required to be conversant with the entire works of Aretæus and Celsus; the aphorisms and epidemics of Hippocrates; and that portion of Galen's writings, entitled "De Usa Partium;" in two, at least, of which authors, the statute directs that the examiners fail not to test the candidates attainments. He must send, fourteen days before the day of examination, certificates of three years' attendance on the medical practice of an hospital, with the usual lectures.

Certificates are required for two courses of anatomy and physiology, each extending from October till the following April or May; two courses on the theory and practice of medicine, each course of the same extent; one course in materia medica; one course in botany; one course in chemistry, provided the course extend through the usual winter session, otherwise two courses will be required.

A candidate for the degree of doctor in medicine must have pursued the study of medicine during three years after he has graduated as bachelor in medicine, and must give, at least, a fortnight's previous notice of his intention to the professor of medicine, at the same time submitting to approbation a subject for a medical dissertation, which dissertation must be read in the public schools of the University within a few days of taking the degree of M.D., and delivered to the professor immediately after it has been read. No graduate in medicine from another University can be incorporated at Oxford, unless he produce testimonials by which it may clearly appear that he has kept by residence terms equal to those required to be so kept in this University; he has completed all the exercises prescribed by the University from which he migrates for the degree of bachelor of arts; and shall have previously undergone the medical examination above described; and shall have fulfilled all the other conditions of the present statute. The fees for a bachelor of medicine are 23*l.*; for a doctor in medicine, 40*l.*

The University of Oxford is in possession of the Bodleian Library, of the Radclyffe Library, of the Ashmolean Museum, and of the Botanic Gardens, founded by the Earl of Derby in 1632 All these are open to students under certain restrictions.

Radclyffe Travelling Fellows.—Dr. Radclyffe left by will an endowment of 600*l.* per annum, to be paid to two persons, to be chosen out of the University of Oxford, when they are M.A., entered on the study of physic, for their maintenance for ten years, and no longer, the half of which time, at least, they are to travel in parts beyond sea, for their better im-

(a) That is, he must be of sixteen terms' standing, and have actually resided in the University twelve terms.

provement. In case of vacancy by death, or at the expiration of the ten years, a new election is to take place within six months.

UNIVERSITY OF CAMBRIDGE.

There is a course of fifty lectures delivered in this University on the principles of pathology and the practice of physic; 5*l.* 5s. first course, afterwards gratis. The Professor of Chemistry delivers thirty lectures, on the general principles of that science, during Lent term, and twenty lectures, principally on organic chemistry, during Easter term. Lectures on experimental philosophy, to illustrate the laws of hydrostatics, pneumatics, and optics, with particular reference to the mathematical theories of light and sound, are delivered in Easter term. About fifty lectures on anatomy are delivered in Michaelmas and Lent terms. The terms of attendance are 5*l.* 5s. for each of two courses, afterwards gratis. The pupils have the opportunity of dissecting in private. Botanical lectures are given during the Easter term, with herborising excursions occasionally. Lectures on natural and experimental philosophy are delivered during the Michaelmas term; the subjects being statics, dynamics, and mechanism, with their practical illustrations: first course, 3*l.* 3s.; second, 2*l.* 2s.; afterwards gratis. The Downing Professor of Physic delivers a course of fifty lectures on some medical subject, A certificate of attendance is required of persons proceeding to the degree of M.B. Lectures are also delivered on crystallography and mineralogy during the Lent term. Addenbrooke's Hospital, which is connected with the University, is recognised by the Colleges of Physicians and Surgeons, and by Apothecaries' Hall. It contains 100 beds, and has a department reserved for cases of midwifery.

A student, before he can become a Bachelor of Physic, must have entered on his sixth year, computed from the date of his first admission at the University, have resided nine terms, and have passed the previous examination.

A Bachelor of Arts may become a Bachelor of Physic after having entered on his sixth year, computed from the date of his first admission at the University, provided that one year at least has intervened between his final determination in arts and his admission to the degree of Bachelor of Physic.

The exercises for this degree are one act and one opponency.

Candidates for the degree of Bachelor of Physic must, in addition to the examination by the Regius Professor of Physic, be examined by the Professors of Anatomy, Chemistry, and Botany, and by the Downing Professor of Medicine. This examination must not take place before the fifth year after admission. They must have diligently attended the lectures of the Regius Professor of Physic for two terms, and must bring to him certificates of examination by the above professors, and of attendance on their lectures, in case the course of lectures of the Professor of Botany consist of not less than twenty lectures, and the courses of lectures of the Professors of Anatomy and Chemistry, and of the Downing Professor of Medicine, of not less than fifty lectures each. They must also deliver to the Regius Professor of Physic certificates of having been diligently employed in attendance on medical lectures, and the practice of some well-known hospital, for two years, or for as long a time as they have been absent from the University during their undergraduateship. Fee, 10*l.* 16s.

A licence *ad practicandum in medicina* may be granted to a bachelor of physic in the terms subsequent to that in which he has taken the degree, or to a master of arts of two years' standing.

Candidates for a licence *ad practicandum in medicina*, being previously bachelors of physic, are required to produce to the Regius Professor of Physic certificates of their having attended on hospital practice for three years, exclusive of the nine terms which they kept by residence for the degree of bachelor of physic, and of their having attended lectures on the following subjects:—Practice of physic and pathology, anatomy and physiology, chemistry, botany, medical jurisprudence, materia medica and pharmacy, principles of surgery, principles of midwifery, practical anatomy, for two seasons.

Candidates for a licence *ad practicandum in medicina*, being previously Masters of Arts, are required to bring satisfactory evidence to the Regius Professor of Physic of their having been employed in the study of physic for five years after they became Bachelors of Arts; and to produce to him certificates of their having attended on hospital practice for three of the said five years, and of their having attended lectures on the subjects before mentioned.

Every candidate for a licence *ad practicandum in medicina*, is required to pass an examination to the satisfaction of the Regius Professor of Physic, the Professor of Anatomy, the Downing Professor of Medicine, and a Doctor of Physic, to be nominated by the Vice-Chancellor, and approved by the Senate, at the first congregation after the 10th of October in each year.

There are two such examinations in every year: one in the week immediately preceding that in which the division of the Michaelmas term falls; the other in the week immediately preceding that in which the division of the Easter term falls.

A candidate for a licence *ad practicandum in medicina*, being previously Bachelor of Physic, cannot be examined for the said licence until the examination which shall occur next but one after his having passed the examination required for the degree of Bachelor of Physic. Fee, 11*l.* 6s.

M.D.—The degree of Doctor of Physic is granted to a Bachelor of Physic of five years', or to a Master of Arts of seven years' standing.

The exercises for this degree are two acts and one opponency.

Every candidate for the degree of Doctor of Physic, who has not previously obtained a licence *ad practicandum in medicina*, is required to produce to the Regius Professor of Physic the same certificate, and pass the same examination as are required in the case of candidates for a licence *ad practicandum in medicina*. Fee, 11*l.* 12s.

The University possesses an Anatomical Museum, the Fitzwilliam, Mesman, Mineralogy, and Geological Museums, an extensive Botanic Garden, and the University Library. To all these the students have access.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

According to the regulations of this College, no one will be admitted as a candidate for the licence, unless he shall have attained the age of six-and-twenty, and shall present a certificate of good moral conduct. His medical education must comprise Anatomy, the Theory and Practice of Medicine, Forensic Medicine, Chemistry, Materia Medica, Natural History, (principally Botany,) Midwifery, and the principles of Surgery, and must extend over the period of five years. Practical Medicine must be studied for three years in a hospital containing at least 100 beds, and having a complete staff of physicians and surgeons. Those who have studied abroad, in addition to giving proof of five years' medical education according to the usual course of study, are required to present testimonials of a twelvemonth's medical practice at any hospital in Great Britain, having the qualifications as above.

No one will be admitted as a licentiate (*Permissus*) who is accustomed to use any secret medicine or nostrum in the treatment of disease, unless previously to his first examination he make known to the President and Censors its composition and the manner in which it is employed. Every candidate must undergo three examinations, each conducted at different times, before the President and Censors in *comitia minora*. The first examination comprises Physiology, the second Pathology, and the third Therapeutics. After the first examination, the President may inquire of the candidate where he studied polite literature and the principles of science, and what honours he has obtained, whether in Philosophy, Arts, or Medicine, in order that the answers may be recorded by the Registrar. The candidate will also be examined in Greek works on medicine, — to wit, Hippocrates, Galen, or Aretæus. Passages from the Aphorisms of Hippocrates or Galen will be brought forward during the first examination, and during the second and third, passages from Hippocrates, Galen, or Aretæus, which must be translated into Latin, and illustrated with a brief commentary. If the candidate be deficient in his knowledge of Greek, he will be required to translate parts of Celsus or Sydenham, or some other Latin work on medicine into English. The examinations are conducted in Latin or English at the pleasure of the Censors.

Whenever a candidate has passed the prescribed examinations, and has been approved, he will be proposed at the

next *comitium majus* (a meeting of the Fellows at large) to be admitted as a licentiate; and, if the majority present consent, he will be admitted accordingly. If, however, the candidate be rejected, he cannot present himself for re-examination for a twelvemonth.

Before the licentiate is admitted, he is required to plight his faith to the College, according to a formula pronounced by the President before the Fellows assembled in *comitium majus*.

If any one holding the licence of the College practise pharmacy afterwards, or engage in merchandise, he is liable to expulsion; and any person practising medicine in London, or within seven miles thereof, without having previously obtained the collegiate licence, is to be admonished by letter to cease his practice until after he has passed the required examinations; and if he continues to practise, despite this admonition, then *legibus regni obnoxnuus erit*.

Persons who have attained their fortieth year, seeking to become licentiates of the College, but whose medical education is not altogether in accordance with the regulations already stated, must present testimonials of professional knowledge and good moral conduct, and, if these are satisfactory, they will be admitted to examination the same as for licentiates in general.

The old regulation restricting the fellowship, as a matter of right, to the graduates of Oxford, Cambridge, and Trinity College, was repealed in the latter part of 1835; and after Easter, 1836, all candidates were declared to be admissible as licentiates only, from which class, when duly qualified, a certain number are to be annually elected fellows in *comitia majora*. The advantage derived by graduates of the English universities, and by the Irish graduates who possess an *ad eundem* degree from an English university, is, that they are eligible a year after they have obtained the licence; the Scotch graduate, being M.A. or B.A., five years later. If the latter does not possess any degree in arts, his eligibility for the fellowship does not occur until after the lapse of seven years. The Irish graduates who do not possess an *ad eundem* degree are not eligible for two years after they are licensed. The President and Censors propose the candidates for the fellowship, but the *comitia majora* may reject the proposition and choose their nominees. The election is by ballot.

The President of the College is *ex-officio* President of the Vaccine Board, a Trustee of the British and Hunterian Museum, Physician to the Queen, and an elector to the Tancred scholarships. The College has the power of recommending a physician to Christ Church, St. Thomas's, and St. Bartholomew's Hospitals; but, if the recommendation succeed, it is then required to pay an annual stipend of 30*l*. or 40*l*. to the Physician. The College also appoints the Professor of Botany to the University of Oxford.

The examinations for the licence are conducted by the President and Censors. The periods at which they take place are Michaelmas, Christmas, Easter, and in the month of June. The new Censors are elected on the 24th of June, when the Harveian oration is delivered. The lectures are delivered in the early part of the year. There are about fifteen delivered: three Gulstonian, three Croonian, and three Lumleian, so called from the names of those who left endowments to the College for the purpose; and six lectures on Materia Medica. The Museum and Library are attached to the Institution, to which the fellows and, by permission, their friends have access.

The President may each year propose one candidate for the licence, he being an M.D., but not otherwise eligible; and he may also name annually a licentiate of ten years' standing for the fellowship; the fellows have also the power of proposing a licentiate of seven years' standing, who is 36 years of age, for the fellowship; but this has been done so rarely, as to be, in fact, obsolete.

The College fees are 56*l*. 17s. for the licence; the fellow pays in addition 1*l*. 1s. annually to the collegiate fund.

If any fellow or licentiate can be proved, to the satisfaction of the President and Censors, to have wilfully accused any other fellow or licentiate of professional ignorance, &c., unless it be before the legally-constituted judges, he shall be fined 4*l*. for the first offence, and 8*l*. for the second; if he offend a third time, if a fellow, he shall be expelled, and, if a licentiate, fined 10*l*. This last fine is to be enforced every time afterwards the licentiate shall so offend. If any fellow or licentiate shall offer his professional assistance to any patient whom he shall know to be under the care of another physician, whether fellow or licentiate, without having been called in to see the patient professionally, he shall be fined 40s.

If any fellow be proved to have made any arrangement with a druggist, to share with him the proceeds in his prescriptions, he shall be expelled; if a licentiate have entered into a similar arrangement, he shall be fined 10*l*. every time he shall so offend.

Every physician, whether fellow or licentiate, shall attach to each prescription which he writes, the day of the month, the name of the sick man, and his own initials. When a consultation takes place, it is to be carried on with modesty, not in the presence of the sick; and if any difference of opinion occurs, it is to be stated with prudence and moderation, so that it may not be noticed by the patient or the friends, but, if requisite, should be mentioned by the ordinary medical attendant. Whoever infringes these regulations will be fined 5*l*. by the President and Censors.

No fellow or licentiate may consult, in London, or within seven miles thereof, with a physician who does not belong to the College, under a penalty of 5*l*.

All fines are to be paid immediately.

The President and Court of the College have the power of committing individuals contemning their authority to Newgate. This power has been exercised by the Court, but not of late years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma of Member of the College.

I. CANDIDATES will be required to produce the following Certificates, viz:—

1. Of being twenty-one years of age.
2. Of having been engaged during four years in the acquirement of professional knowledge.
3. Of having studied Practical Pharmacy during six months.
4. Of having attended at a recognised hospital or hospitals in the United Kingdom the Practice of Physic during one winter (a) and one summer (b) session.
5. Of having attended, during three winter and three summer sessions, the Practice of Surgery at a recognised hospital or hospitals in the United Kingdom.
6. Of having studied Anatomy and Physiology, by attendance on lectures and demonstrations, and by dissections during three winter sessions.
7. Of having attended, during two winter sessions, lectures on the Principles and Practice of Surgery.
8. Of having attended, during one summer session, lectures on Materia Medica, and lectures on Midwifery; Practical Midwifery to be attended at any time after the conclusion of the session.
9. And of having attended one course of lectures on the Practice of Physic and one course on Chemistry.

The course of study hereby prescribed is required to be observed by candidates who shall have pursued their studies in hospitals and schools in England. And those candidates who shall have studied in Ireland or Scotland will be admitted to examination upon producing certificates of having attended the required courses of lectures as delivered in the schools of Ireland and Scotland.

II. Members or licentiates of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university, requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proof of being 21 years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in medicine of any legally constituted college or university requiring residence to obtain degrees will be admitted for examination on adducing, together with their diploma or degree, proof of having completed the anatomical and surgical education required by the foregoing regulations, either at the school and hospital of the uni-

(a) The winter session comprises a period of six months, and, in England, commences on the 1st of October and terminates on the 31st of March.

(b) The summer session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July. No provincial hospital will be recognised by this College which contains less than 100 patients, and no metropolitan hospital which contains less than 150 patients.

versity where they shall have graduated, or at one or more of the recognised schools and hospitals in the United Kingdom.

IV. Candidates who shall have attended at recognised colonial hospitals and schools,(c) the medical and surgical practice and the several courses of lectures, with the demonstrations and dissections required by the foregoing regulations, will be admitted for examination upon producing certificates of such attendance, together with certificates of having attended in London, during one winter session, the surgical practice of a recognised hospital, and lectures on anatomy, physiology, and surgery, with demonstrations and dissections.

V. Certificates will not be recognised from any hospital unless the surgeons thereto be members of one of the legally constituted colleges of surgeons in the United Kingdom; nor from any school of anatomy and physiology or midwifery, unless the teachers in such school be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of surgery, unless the teachers in such school be members of one of the legally constituted colleges of surgeons in the United Kingdom.

VI. Certificates will not be received on more than one branch of science from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, will be respectively considered as one branch of science.

VII. Certificates will not be received from candidates who have studied in London, unless they shall have registered their tickets at the college, as required by the regulations, during the last ten days of January, March, and October in each year; nor from candidates who have studied elsewhere, unless their names shall duly appear in the registers transmitted during such studies from their respective schools.

By order of the Council,

Aug. 16, 1849. EDMUND BELFOUR, Sec.

N.B. In the certificates of attendance on hospital practice and on lectures, it is required that the dates of commencement and termination be clearly expressed; and no interlineation, erasure, or alteration will be allowed.

Blank forms of the required certificates may be obtained on application to the Secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination; and all such certificates are retained at the college.

Candidates are allowed to present themselves for the examinations in classics, mathematics, and French, at any period after they shall have attained the age of eighteen years, and upon the payment of ten guineas, which sum will be allowed in the fee payable upon admission to the fellowship; and such examinations will take place in the first week of the month preceding the professional examinations.

STUDENTSHIPS.

The Ordinance directs, that there shall be two studentships of the college, in Human and Comparative Anatomy, to be held by each student for the term of two years, at a salary of 100*l.* per annum. That candidates shall be members of the college, under 26 years of age. That the council shall determine annually whether one or more of such appointments shall take place during the current year, and notify its resolution by public advertisement. That the appointment be made in the month of June, or as soon after as possible. And that the students shall be subject to such duties and restrictions as the council from time to time shall direct; and in case of misconduct shall be liable to dismissal.

N.B. Candidates for the appointment must transmit their applications to the secretary on or before the 1st of May, together with certificates of general good character and of fair acquirements in general learning, signed by two qualified members of the medical profession.

The studentships having been instituted for the cultivation and extension of human and comparative anatomy and physiology, by means of the opportunities afforded at the college in the preservation and enlargement of the museum, and in the various scientific labours connected with that department, are held under the following

Regulations.—The students are required to devote their whole time to the study of anatomy, physiology, and the connected branches of knowledge, and to the service of the college in the museum. They shall not undertake any other employment, such as that of demonstrator, lecturer, or teacher; nor shall they engage in private practice, either as principal or assistant; and they shall avoid all appearance of practising by not designating their profession on the doors of their residences. They shall be employed at the college in such a manner as shall be pointed out by the conservators, whose directions they shall in all instances obey, referring to them in all matters on which they may entertain doubts. They shall not be absent from their duties in the museum (except in the case subsequently specified) without the permission of the conservators; nor shall they leave London without permission of the president and the knowledge of the chairman of the museum committee. They shall attend to their duties in the college from ten a.m. to four p.m., daily, except on Sunday, and on one other day in each week, on which they are allowed to visit their respective hospitals, and to read in the library of the college. On particular occasions, when the business of the museum shall require it, they shall attend, under the directions of the conservators, earlier or later than the hours above-mentioned. Each student is also required to attend in the museum for the purpose of giving information to visitors, one day in each week from twelve to four o'clock, and on any other day when the conservators, with the sanction of the museum committee, shall so direct. They shall record, in books provided for that purpose, the histories of their respective dissections and the particulars of their other occupations in the college; and they shall lay such books before the museum committee at least once a month. It is expected that they make themselves familiar with every thing relating to the practical study of anatomy, such as the use of the microscope, the dissection of small animals, the art of preserving animal substances, of injecting and putting up anatomical preparations. It is also hoped that they will devote a portion of each evening to the perusal of works on Anatomy and Physiology, and on the auxiliary branches of knowledge.

APOTHECARIES' HALL.

Regulations, &c.

Every candidate for a certificate of qualification to practice as an apothecary, will be required to produce testimonials:

1. Of having served an apprenticeship of not less than five years to an apothecary. No gentleman practising as an apothecary in England or Wales can give his apprentice a legal title to examination, unless he is himself legally qualified to practise as an apothecary, either by having been in practice prior to or on the 1st of August, 1815, or by having received a certificate of his qualification from the Court of Examiners. An apprenticeship for not less than five years to surgeons practising as apothecaries in Ireland and Scotland, gives to the apprentice a title to be admitted to examination.

2. Of having attained the full age of twenty-one years. As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.

3. Of good moral conduct. A testimonial of moral character from the gentleman to whom the candidate has been an apprentice, will always be more satisfactory than from any other person.

4. And of having pursued a course of medical study in conformity with the regulations of the court.

Course of Study.

Every candidate whose attendance on lectures shall commence on or after the 1st of October, 1849, must attend the following lectures and medical practice during not less than three winter and two summer sessions; each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

First Winter Session.—Chemistry; Anatomy and Physiology; Anatomical Demonstrations.

First Summer Session.—Materia Medica and Therapeutics; Botany and Vegetable Physiology; Midwifery, and Diseases of Women and Children.

(c) The recognition of colonial hospitals and schools is governed by the same regulations with respect to number of patients, to courses of lectures, and to physicians, surgeons, and lecturers, as apply to the recognition of provincial hospitals and schools in England.

Second Winter Session.—Anatomy and Physiology; Anatomical Demonstrations and Dissections; Principles and Practice of Medicine; Medical Practice.(a)

Second Summer Session.—Medical Practice; (a) Midwifery and Diseases of Women and Children; Forensic Medicine: Practical Chemistry; (b) Clinical Medicine and Morbid Anatomy.

Third Winter Session.—Dissections; Principles and Practice of Medicine; Medical Practice; (a) Clinical Medicine and Morbid Anatomy.

Practical Midwifery, at any time after the conclusion of the first course of midwifery lectures.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the order prescribed.

Recognition of Lecturers and Schools.

No member of the Court of Examiners will be recognised as a lecturer on any branch of medical science.

No lecturer will be recognised by the Court who is not connected with a recognised medical school; or who teaches on more than two branches of medical science; nor until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and of his ability as a teacher thereof, from at least two persons of acknowledged talents and distinguished acquirements in the particular branch of science in question; and has also given a public course of lectures on the subject he purposes to teach; but if, after such preliminary course, the lecturer shall be recognised, certificates of attendance on that course will be received.

Satisfactory assurance must also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz., that he has, if lecturing—

On chemistry, a laboratory and competent apparatus; on materia medica, a museum sufficiently extensive; on botany, a hortus siccus, plates or drawings, and recent plants; on midwifery, a museum, and such appointment in a public institution as may afford the means of practical instruction to the pupils.

Lectures on anatomy, and physiology, and anatomical demonstrations, must be in conformity with the regulations of the Royal College of Surgeons.

The lecturer on the principles and practice of medicine, if he lectures in London, must be a member of the Royal College of Physicians of London; and if in a provincial town, either a member of the Royal College of Physicians of London, or a graduated Doctor of Medicine of a British University of four years' standing, unless prior to his graduation he had been for four years a licentiate of this court.

The lecturer on materia medica and therapeutics must be a member of the Royal College of Physicians, or a graduated Doctor of Medicine of a British University of four years' standing; or he must have been a licentiate of this court for the same period.

The lecturer on midwifery must be a member of one of the legally constituted Colleges of Physicians or Surgeons in the United Kingdom of four years' standing; or he must have been a licentiate of this court for the same period.

The names of the lecturers recognised by the court, may be known on application to the secretary at the hall of the Society.

The certificates of teachers recognised by the constituted medical authorities in Ireland and Scotland, as also those of the medical professors in foreign universities, are received by the court.

Much inconvenience having arisen from the presentation of schedules signed by *lecturers unknown to the court*, it is particularly requested that the registrars of the medical schools will furnish a correct list of their recognised teachers to the secretary of this court, at the commencement of every winter session.

Hospitals and Dispensaries.

No hospital will be recognised by the Court, unless, 1. It contain at least one hundred beds. 2. It be under the care of two or more physicians, members of the Royal College of Physicians of London, or graduated doctors of medicine of a British university. 3. The physicians give lectures on clinical medicine and instruction in morbid anatomy. 4. The apothecary be legally qualified, either by having been in practice prior to the 1st of August, 1815, or by having received a certificate of qualification from this Court. No dispensary will be recognised by the Court unless it be situated in some town where there is a recognised medical school, and be under the care of at least two physicians and an apothecary legally qualified. No medical practice will be available, unless it be attended in conformity with the course of study prescribed for pupils.

Registration of Testimonials.

All testimonials must be given on a printed *schedule*, and the *blanks* therein *must* be filled up by the lecturers themselves. Students will be supplied with schedules at the time of their first registration:

In London, at this Hall.

In the provincial towns, from the gentlemen who keep the registers of the medical schools; and whose names may be known by application to the secretary of this Court.

All students in London are required *personally* to register the several classes for which they have taken tickets; and those only will be considered as complying with the regulations of the Court whose names and classes in the register correspond with their schedules.

Tickets of admission to lectures and medical practice must be registered in the months of October and May; but no ticket will be registered unless it be dated within seven days from the commencement of the course; and certificates of attendance must be registered in the months of April and August. Due notice of the days and hours of such registrations will be given from time to time.

The Court also require students at the provincial medical schools to register their names, in their own handwriting, with the registrar of each respective school, within the first twenty-one days of October, and first fourteen days of May; and to register their certificates of having duly attended lectures or medical practice within fourteen days of the completion of such attendance.

The registrars are requested to furnish the Court of Examiners with a copy of each registration *immediately* after its close, as those students only will be admitted to examination whose registrations have been *duly* communicated to the Court.

Preliminary Latin Examination.

On the first Saturday in every month, except August and September, those students who have completed two winter sessions of their medical studies may be admitted to an examination in Celsus and Gregory, provided there should be twenty names on the list. Candidates will be required to leave their schedules at the beadle's office, on or before the preceding Monday, and to attend at half-past three o'clock, p.m., on the day of examination.

Those gentlemen who fail to pass this examination satisfactorily will not be re-admitted until they appear for their general examination.

Examination.

The Court of Examiners meet in the hall every Thursday, where candidates are required to attend at a quarter before four o'clock.

Every person intending to offer himself for examination must give notice in writing to the clerk of the society on or before the Monday previously to the day of examination, and must at the same time deposit all the required testimonials at the office of the beadle, where attendance is given every day, except Sunday, from ten until four o'clock.

The examination of the candidate for a certificate of qualification to practise as an apothecary, will be as follows;—

In translating portions of the first four books of "Celsus de Medicinâ," and of the first twenty-three chapters of "Gregory's Conspectus Medicinæ Theoreticæ":

In Physicians' Prescriptions and the Pharmacopœia Londinensis:

In Chemistry:

(a) Medical practice must be attended during the full term of eighteen months; twelve months at an hospital connected with a recognised medical school, and six months either at a recognised hospital or dispensary, if more convenient.

(b) By practical chemistry is intended, a specific course of instruction in the laboratory, with an opportunity of personal manipulation in the ordinary processes of chemistry, and of acquiring a knowledge of the various re-agents for poison.

Note.—In place of the second course of lectures on the theory and practice of medicine, the court will admit a certificate of attendance on a course of clinical lectures, delivered in a recognised hospital by a distinct professor, consisting of not less than seventy-five lectures; attended by the student after the first systematic course upon the theory and practice of medicine.

In Materia Medica and Therapeutics:
In Botany:
In Anatomy and Physiology:
In the Principles and Practice of Medicine, including Midwifery and the Diseases of Children.

The examination of the candidate for a certificate of qualification to act as assistant to an apothecary, in compounding and dispensing medicines, will be as follows:—

In translating Physicians' Prescriptions and the Pharmacopœia Londinensis:
In Pharmacy and Materia Medica.

By the 22nd section of the Act of Parliament, no rejected candidate for a certificate to practise as an apothecary, can be re-examined until the expiration of six months from his former examination; and no rejected candidate as an assistant until the expiration of three months.

The Act directs the following sums to be paid for certificates.

For London, and within ten miles thereof, ten guineas.
For all other parts of England and Wales, six guineas.

Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition.

For an assistant's certificate, two guineas.

For information relative to these Regulations students are referred to the beadle, at Apothecaries' Hall, every day, (Sunday excepted,) between the hours of ten and four o'clock.

It is expressly ordered by the Court of Examiners, that no gratuity be received by any officer or servant of the Court.

Information on all subjects connected with the "Act for better regulating the Practice of Apothecaries," may be obtained on application to Mr. R. B. Upton, clerk of the society, at the hall, every day, (Sunday excepted,) between the hours of one and three o'clock.

HOSPITALS AND MEDICAL SCHOOLS.

ST. BARTHOLOMEW'S HOSPITAL AND MEDICAL COLLEGE.

The hospital contains 580 beds; of which 400 are devoted to surgical cases and the diseases of the eye, and 180 to medical cases, and the diseases of women. The number of patients is upwards of 70,000 annually; of which the in-patients amount to nearly 6000, the out-patients and casualities to 65,000.

Fees of Attendance.—Medical Practice—Six months, 10 guineas; nine months, 12 guineas; eighteen months, 15 guineas; an unlimited period, 30 guineas. The clinical clerks to the physicians are elected from the most diligent students. Surgical Practice—Six months, 15 guineas; twelve months, 20 guineas; three years, 25 guineas; an unlimited period, 30 guineas. Dresserships—Three months, 12*l.* 12s; six months, 18*l.* 18s.; twelve months, 26*l.* 5s. The entrance to the Medical or Surgical Practice confers the right of attending the courses of clinical lectures by the physicians or surgeons.

Surgical operations on Saturdays, at one o'clock. The requisite opportunity of attending cases in midwifery is provided for the students of the midwifery class.

The museums of anatomy, materia medica, and botany, are open daily to the students of the respective classes. A reading-room is open to all students of the school during the greater part of the day. Subscription, for three years, 10s. The library contains upwards of 4000 volumes of the standard works on medical and other sciences, with the chief medical journals, which are circulated among the subscribers. Subscription for twelve months, 1*l.* 1s.; for three years, 1*l.* 10s.; for an unlimited period, 2*l.* 10s.

Collegiate Establishment.—Warden, Mr. Paget. Students can reside within the hospital walls, subject to the rules of the collegiate system, established under the direction of the treasurer and a committee of governors of the hospital. Some of the teachers and other gentlemen connected with the hospital also receive students to reside with them.

Scholarships, Prizes, &c.—At the end of the winter session, examinations will be held for two scholarships; one of the value of 45*l.* a year, and tenable for two years; the other of 50*l.* for one year. The examinations of the classes for prizes and certificates of merit will take place at the same time.

Further information may be obtained from the medical or surgical officers or lecturers, or at the anatomical museum or library.

ST. THOMAS'S HOSPITAL.—MEDICAL AND SURGICAL SCHOOL.

Session commences on Tuesday, the 1st of October.

Hospital Staff.—Dr. Roots, consulting physician; Dr. Barker, Dr. Leeson, and Dr Risdon Bennett, physicians; Mr. Green, Mr. South, and Mr. Macmurdo, surgeons; Dr. Goolden, Dr. Cohen, and Dr. Peacock, assistant physicians; Mr. Solly, Mr. le Gros Clark, and Mr. Dixon, assistant-surgeons; Dr. Waller, obstetric physician; Mr. Simon, lecturer on general and clinical pathology. Ophthalmic Department: Mr. Macmurdo, surgeon; Mr. Dixon, assistant-surgeon; Mr. Bristowe and Mr. Barwell, house-surgeons; Mr. J. W. Keyworth, resident accoucheur.

The out-patients are seen at nine o'clock. The wards are visited daily between twelve and three.

Gentlemen proposing to become students of St. Thomas's Hospital are expected to produce satisfactory testimonials of moral character and general education; and with a view of encouraging those acquirements which tend to raise the character of the profession, the governors have decided on instituting a voluntary examination in classics and mathematics. The admission fee to hospital practice and all the lectures is 40*l.* for the first year, a similar sum for the second, and 10*l.* for each succeeding year. Special entries to any course of lectures, or to hospital practice, may be made as heretofore. The most meritorious of the students will be selected to hold the following appointments in the hospital, without the payment of any additional fee, viz.:—those of house-surgeon, physician's clinical clerk, surgeon's dresser, and resident accoucheur. Examinations will be held at the end of the several terms, winter, spring, and summer.

Scholarships and Prizes.—A scholarship of 20*l.* for the student who shall pass the best voluntary classical and mathematical examination, at the commencement of his hospital attendence. Two scholarships, for first year's men, each of the value of 20*l.* a year, and tenable for three years, will be awarded annually. The resident accoucheur will be provided with rooms and commons in the hospital free of expense. He will be selected, upon examination, from those students who, being otherwise qualified, have attended the greatest number of cases. The twelve dressers will be selected according to merit at the periodical examinations. They will be provided with rooms and commons in the hospital, free of expense, during their weeks of attendance. The house-surgeons, two in number, will be selected annually. They will be provided with rooms and commons in the hospital, free of expense. These appointments will be awarded to gentlemen who have most distinguished themselves as dressers. They must be Members of the Royal College of Surgeons, and either licentiates of the Society of apothecaries, or graduates in medicine. Prizes and certificates of honour will also be awarded to those who distinguish themselves at the periodical examinations in each subject. Two prizes to clinical clerks.—The first prize of the value of five guineas; the second three guineas. The President's prizes.—The first of the value of ten guineas, to be awarded for attention and good conduct, to the dresser who shall have reported most accurately the greatest number of surgical cases. The second, of the value of five guineas, to be awarded to a second year's student, for the best report of medical cases. Dr. Roots's prize, of the value of ten guineas, will be awarded to the physician's clinical clerk, who shall produce the best report of not fewer than twelve medical cases which have occurred in the hospital during the preceding twelve months, each case being accompanied with notes illustrative of its pathology, diagnosis, and treatment. Mr. Newman Smith's prize, of the value of five pounds, for "The best Commentary on some Disease of the Nervous System." One of the governors, a prize of the value of five guineas, will be awarded to the student who shall write the best report on the ophthalmic cases which have been admitted into the hospital. Mr. George Vaughan's prize.—The Cheselden medal will be awarded to the student who, at the end of the third year, shall most distinguish himself in the examinations on Surgical Anatomy and Surgery. The Treasurer's

annual prizes.—The first, a gold medal, for general proficiency and good conduct, for students at the completion of their studies. The second, of the value of five guineas, for the best essay read before the Physical Society. The Treasurer's prize.—100*l.* will be awarded, in 1851, to the author of the best Essay, including Original Researches in Organic Chemistry in its relation to Pathology and Practical Medicine. The special subject of the Essay is "On the Chemical and Physiological Action of Mercurial Preparations." Mr. Whitfield, resident medical officer, is authorised to enter students, and will give detailed conditions of the various prizes, with any other particulars which may be required.

GUY'S HOSPITAL.

The medical session commences on the 1st of October. Gentlemen who desire to become students must give satisfactory testimony as to their education and conduct; they are required to pay 40*l.* for the first year, 40*l.* for the second year, and 10*l.* for every succeeding year of attendance; or the sum of 100*l.* in one payment will entitle a student to a perpetual ticket.

The payment for the year admits to the lectures, practice, and all the privileges of a student, and for that year only.

Dressers, clinical clerks, assistants, and resident obstetric clerks, are selected according to merit from those students who have attended a second year.

The privileges of a student will be withdrawn in the event of neglect or misconduct.

Certificates will not be given for lectures and practice, unless they are duly attended.

The Christmas recess will commence December 24, and the lectures will be resumed January 6. The winter session will terminate March 31, and the summer course will commence May 1.

The hospital was founded by Thomas Guy, in 1724. It contains 580 beds. Patients are admitted on application, and require no letter of recommendation. The day for general admission is Wednesday, at 10 o'clock, but accidents and cases of urgent disease are received at all times.

Medical Officers.—Consulting Physician, Richard Bright, M.D., F.R.S. Physicians: Thomas Addison, M.D.; B. G. Babington, M.D., F.R.S.; G. H. Barlow, M.D. Assistant-Physicians: H. M. Hughes, M.D.; G. Owen Rees, M.D., F.R.S.; Golding Bird, M.D., F.R.S. Surgeons: Bransby B. Cooper, Esq., F.R.S.; Edward Cock, Esq.; J. Hilton, Esq., F.R.S. Assistant-Surgeons: John Birkett, Esq.; Alfred Poland, Esq. Obstetric Physicians: J. C. W. Lever, M.D.; Henry Oldham, M.D. Surgeon of the Eye Infirmary, John F. France, Esq. Apothecary, James Stocker, Esq.

The library, museums, and model rooms, are open to the students.

Mr. Stocker, Apothecary to Guy's Hospital, is authorised to enter the names of students.

UNIVERSITY COLLEGE, LONDON.
FACULTY OF MEDICINE.

SESSION 1850-51.

The session is divided into two terms,—a winter and a summer term. The winter term begins on Tuesday, 1st of October, and ends on the 15th of April. The summer term begins on the 1st of May, and ends on the 31st of July.

Frequent examinations are held in every class. Medals and certificates of honour are given in every class at the end of each term; but those pupils only who have regularly attended the examinations will be admitted to contend for them.

At the end of every session the "Longridge" exhibition of 40*l.* is awarded as a prize for general proficiency.

The payments stated below for each class are made by students nominated by proprietors; 5s. additional for every pound, until this extra payment amounts to 4*l.* 10s., are paid by those not nominated.

A college fee of 10s. for one class, and 1*l.* for two or more classes, is paid by each student every session; where, however, the course is of short duration, this fee is diminished. The matriculation fee of 2*l.* relieves the student, during the whole course of his study, from the college fee.

All fees are paid at the office of the college, where the student receives his tickets, which he afterwards takes to be signed by the professor. The office is open from 9 o'clock till 4, except on Saturdays, when it closes at 2.

The general library is open daily from 9 to 5 during the session: the medical library from 9 to 7 during the winter term, from 9 to 5 during the summer term, and from 9 to 4 during the vacations. The museum of anatomy and the museum of chemistry and materia medica are open daily.

Residence of Students.—Several of the professors receive students to reside with them; and in the office of the college there is kept a register of parties unconnected with the college, who receive boarders into their families; among these are several medical gentlemen. The register will afford information as to terms and other particulars.

Degrees in Medicine.—The examinations for degrees in medicine, and for honours, exhibitions, and scholarships conferred by the University, take place annually, as follow:—For matriculation, in July; for M.B., the first in August, the second in November; for M.D., in November.

The courses of the medical faculty of this College are recognised by the universities of Scotland as academical courses.

UNIVERSITY COLLEGE HOSPITAL.

Physicians: Dr. Walshe, Dr. Parkes, Dr. Garrod; Dr. Murphy, obstetric physician; Dr. Jenner, Dr. Hare, assistant physicians. Surgeons: Mr. Quain, Mr. Erichsen; Mr. Quain, consulting surgeon to the Eye Infirmary; Mr. Durancé George, dental surgeon; Mr. Wharton Jones, ophthalmic surgeon; Mr. Marshall, Mr. Cadge, assistant-surgeons.

Terms of Admission to the Practice and Clinical Lectures.—To students who have already entered, in the medical faculty of the college, to three classes, of which the courses are of six months' duration,—(two classes, in which the courses are of three months' duration, being considered equivalent to one of six months.)

Also to pupils who produce certificates of having attended a course of lectures of a recognised school of medicine, and during one year the practice of a recognised hospital.

For perpetual admission to the medical and surgical practice, 26*l.* 5s. For one year to the physicians' and surgeons' practice, 21*l.*; physicians' or surgeons' practice separately 15*l.* 15s. For six months to the physicians' and surgeons' practice, 15*l.* 15s.; physicians' or surgeons' practice separately, 10*l.* 10s.

To Pupils other than as above specified.—For perpetual admission to the Medical and Surgical Practice, 36*l.* 15s. For one year to the Physicians' and Surgeons' Practice, 30*l.*; Physicians' or Surgeons' Practice separately, 22*l.* For six months to the Physicians' and Surgeons' Practice, 22*l.*; Physicians' or Surgeons' Practice separately, 15*l.* The above fees to be paid at the office of the college.

(*Note.*)—These fees are devoted to the maintenance of the hospitals, the physicians and surgeons having relinquished their proportion of them for its benefit.

Every pupil pays, in addition to the fees, 10s. apothecary's, and 5s. office fee. Physicians' assistants, house-surgeons, midwifery assistants, physicians' clerks, and surgeons' dressers are selected from pupils, being students of the college and of unexceptionable moral character, without additional payments. In case of the qualifications of the candidates for the respective offices being equal, preference will be given to those who have obtained the highest honours in the medical classes of the college. The physicians' assistants and house-surgeons reside in the hospital, paying for their board. The physicians' and surgeons' visits are made daily at one and two o'clock. Each of the three physicians visits his patients three times a week.

Obstetric Department.—Dr. Murphy attends three times a week to see patients affected with uterine diseases, and children; and on alternate days to receive applications from women who wish to be attended in their confinement.

Ophthalmic Department.—Mr. Wharton Jones will attend three times a week to see patients affected with diseases of the eye, and will occasionally deliver lectures at the hospital, on the cases under his charge.

An assistant-physician and an assistant-surgeon attend four days in the week for the care of out-patients. The dental surgeon attends every Saturday at nine a.m.

Degrees in Arts and Laws.—The examinations for degrees in Arts and Laws, and for honours, exhibitions, and scholarships, conferred by the University of London, take place annually as follow:—For matriculation, in July; for B.A.,

in October; for M.A., in May or June; for B.L. and LL.D., in November.

The regulations of the college respecting the certificates of studentship required by the University are printed separately.

Scholarships.—Three Andrews's Scolarships, viz., one of 100*l.* and two of 50*l.*, will be awarded in October next to proficients in Latin, Greek, Mathematics, and Natural Philosophy. Candidates must have been, during the academical year immediately preceding, students in the college, or pupils in the school. The examination will take place between the 1st and 6th of October, and be conducted by examiners appointed by the Council. Further announcement will be made in the course of the session respecting the Andrews' Scholarships of 1851.

Printed copies of the regulations concerning these scholarships may be had on application at the office.

KING'S COLLEGE.

SESSION 1849—50.

Medical Department.—The academical year in this department is divided into two sessions; the winter session, which will begin on the 1st of October, and terminate on the 31st of March; and the summer session, which will begin on the 1st of May, and end on the 31st of July. Students are of two kinds, matriculated and occasional. Matriculated students are those who receive their entire medical education at King's College. They wear the college cap and gown, and enjoy certain privileges enumerated in the calendar. Occasional students comprehend those who attend only the lectures of particular professors.

KING'S COLLEGE HOSPITAL.

The hospital is situated in the immediate neighbourhood of the college, and accommodates 120 in-patients.

Consulting Physicians.—Thomas Watson, M.D.; Robert Fergusson, M.D. Physicians.—George Budd, M.D., F.R.S.; R. B. Tod, M.D., F.R.S. Physician for Diseases of Women and Children, and Physician Accoucheur.—Arthur Farre, M.D., F.R.S. Physician to Out-patients.—W. A. Guy, M.B. Assistant Physician.—George Johnson, M.D. Surgeons.—W. Fergusson, F.R.S.; Richard Partridge, F.R.S. Assistant Surgeons.—William Bowman, F.R.S.; Henry Lee, F.R.C.S. Surgeon-Dentist.—S. Cartwright, jun.

Dr. Arthur Farre attends at half-past eleven on Tuesday, Thursday, and Saturday.

Clinical lectures are delivered, after the visit, on alternate Tuesdays, by Dr. Todd; Fridays, by Dr. Budd; Mondays, by Mr. Partridge; Thursdays, by Mr. Fergusson.

The physician's assistant and clinical clerks, the housegeon and dressers, are selected by examination from among those matriculated students of the college who are pupils of the hospital.—No fee is paid for any of these appointments.

The expense of the course of study required by the regulations of the College of Surgeons and the Society of Apothecaries is 96*l.* 12s. This payment may be made either in one sum upon matriculation, or in two equal sums; the one at the commencement of the winter session, October 1st, and the other after the Christmas vacation, not later than the 21st January. The following fees must be paid at the time of matriculation:—Matriculation fee, 1*l.* 1s.; library fee, 1*l.* 1s.; subscription to the scholarship fund, 1*l.* 1s.; cap and gown, 1*l.* 10s.; calendar, 2s: total, 4*l.* 15s. The fees for admission to the laboratory class of analytical chemistry are, for one month, 4*l.* 4s.; for three months, 10*l.* 10s.; for six months, 18*l.* 18s.; for nine months, 26*l.* 5s. Fee for the medical tutor, to resident students, 2*l.* 2s. for each academical year; to non-resident students, 3*l.* 3s. All resident students are required to attend the medical tutor during their first two years.

Hospital Fees.—Perpetual admission to the medical and surgical Practice:—For matriculated students of King's College, 31*l.* 10s.; for pupils who are not matriculated students, 36*l.* 15s. Medical Practice:—Three months, 6*l.* 6s.; six months, 10*l.* 10s.; twelve months or eighteen months, 15*l.* 15s.; perpetual, 21*l.* Surgical Practice:—Three months, 10*l.* 10s.; six months, 15*l.* 15s.; twelve months or twenty-one months, 21*l.*; perpetual, 26*l.* 5s. Registration-fee, to be paid to the Secretary at King's College Hospital, 10s. 6d.

LONDON HOSPITAL MEDICAL AND SURGICAL SCHOOL,

MILE-END.

SESSION 1850-51.

General fee for attendance on the medical and surgical practice qualifying for the examinations at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the lectures, 84 guineas, payable in two instalments of 42 guineas each, at the commencement of the two first sessions of attendance. Perpetual fee to the lectures alone, 50*l.* Students can make special entries for lectures or practice as heretofore.

Hospital Practice.—The London Hospital contains 320 beds, of which 100 are allotted to medical and 220 to surgical cases. Physicians: Dr. Cobb, Dr. Frampton, Dr. Little. Assistant-Physicians: Dr. Pereira, Dr. Fraser, Dr. Davies. Surgeons: Mr. Luke, Mr. Adams, Mr. Curling. Assistant-Surgeons: Mr. Critchett, Mr. N. Ward, Mr. Wordsworth. One of the physicians and one of the surgeons attend daily; the latter at one o'clock; and one of the assistant-physicians and one of the assistant-surgeons daily at twelve. Casualties are received at all hours in the accident-room by the house-surgeons and dressers. Surgical operations, except in cases of emergency, are performed on Thursdays, at one o'clock. Consulting physician in obstetric cases, Dr. Ramsbotham, who attends on Mondays, at one p.m.

Fees of Attendance on the Hospital Practice.—On the Medical Practice: For six months, 6 guineas; for period required by Apothecaries' Hall, 11 guineas. On the Surgical Practice and Dressing: For twelve months, including six months' dressership, 12 guineas; for eighteen months, including twelve months' dressership, 18 guineas; for three years, including twelve months' dressership, 25 guineas; for twelve months' additional dressership, during the above three years, 5 guineas; for twelve months' dressership after expiration of the above three years, 8 guineas.

The pupils enter and dress under all the surgeons. Two in rotation remain in the hospital day and night for a week, and are provided with commons. The privilege of dressing for twelve months is given annually to three pupils of the school, each pupil being previously required to dress the out-patients for one year.

Two house-surgeons are elected every six months, without any additional fee. They reside in the hospital, and are provided with commons.

Clinical Lectures.—Clinical lectures will be given by the physicians and surgeons.

Practical Pathology.—The *post-mortem* examinations take place, as opportunities occur, at two p.m., and are superintended by Mr. Wordsworth.

Microscopical Demonstrations of Morbid Anatomy will be given by Dr. Parker.

Museum and Library.—The anatomical museum is open daily to the students from eleven a.m. to two p.m. The reading-room is open daily from ten a.m. to four p.m. Gentlemen who have entered to the medical or surgical practice, or to two or more courses of lectures, will be admitted without any fee to the reading-room; and to the privileges of the library, on depositing 1*l.*, to be returned at the termination of the period of study at the hospital. A cabinet of materia medica is open to the students.

Prizes and Honorary Distinctions.—Medals and certificates of merit will be offered for competition in all the classes.

Hospital Prizes.—Two gold medals will be annually awarded by the governors to such students, attending the medical and surgical practice, as shall have most distinguished themselves in the performance of their duties at the hospital.

Several of the lecturers receive resident pupils.

Further information may be obtained from Mr. Adams or Mr. Curling, or on application to Dr. Lethcby, at the Anatomical Museum.

THE MIDDLESEX HOSPITAL SCHOOL OF MEDICINE.

SESSION 1850-51.

The session will commence on Tuesday, October 1st, 1850, with an introductory lecture by Dr. Goodfellow, at one o'clock.

Hospital Practice.—Physicians: Dr. Hawkins, Dr. Crawford, Dr. Seth Thompson. Physician-Accoucheur: Dr.

Frere. Assistant-Physician: Dr. A. P. Stewart. Surgeons: Mr. Shaw, Mr. De Morgan, Mr. Moore. Assistant-Surgeon: Mr. Henry. Surgeon-Dentist: John Tomes, F.R.S. Apothecary: Mr. Corfe.

The hospital has recently been much enlarged, and important alterations and improvements have been introduced in its internal arrangements. It now receives 285 in-patients, and contains wards specially appropriated to the admission of cases of syphilis and of cancer, in the male and female, and of uterine disease.

Clinical clerks and dressers are selected by the physicians and surgeons from the most deserving pupils, without additional fee.

Pupils are required to dress in the out-patient room and surgery, before they are eligible to be dressers to the in-door patients.

A senior and junior house-surgeon are elected half-yearly from the dressers, and are provided with board and residence in the hospital, free of expense.

The in-patients are visited daily at one o'clock, punctually. Clinical lectures are given twice a week by the physicians and surgeons respectively. Practical instruction in minor surgery, bandaging, &c., is given by the assistant-surgeon. The hours of lecture, &c., are so arranged as to allow as large an amount of time as possible for attendance in the wards of the hospital, and at *post-mortem* examinations, and for dissection.

The average annual number of out-patients treated during the past five years is 9316.

The Medical and Surgical Out-patients are attended on three days in the week by the assistant-physician and assistant-surgeon respectively, at half-past 8 a.m., and every opportunity is taken to render this department available to the pupils for the ready investigation of disease.

Midwifery and the Diseases of Women and Children.—Upwards of 500 cases of labour were attended under the direction of the physician-accoucheur, during the last year; and the students are at all times furnished with an ample supply of cases under his superintendence. Out-patients with uterine and infantile diseases are seen by the physician-accoucheur on Wednesdays and Saturdays, at 12 o'clock.

Ophthalmic Department.—Patients with diseases of the eye are attended by Mr. De Morgan on Mondays, Wednesdays, and Fridays at 12 o'clock.

Dental Surgery.—Pupils receive instruction on diseases of the teeth, and the operations connected with them, on Tuesdays, Thursdays, and Saturdays, at nine o'clock, from the surgeon-dentist.

Morbid Anatomy and Pathology.—Post-mortem examinations are made by the assistant-surgeon at two o'clock.

Terms of Attendance on Hospital Practice.—Medical Practice: For three months, 6*l.* 6s.; six months, 10*l.* 10s.; eighteen months, 15*l.* 15s.; an unlimited time, 21*l.* Surgical Practice: For three months, 9*l.* 9s.; six months, 12*l.* 12s.; three years, 18*l.* 18s.; an unlimited time, 21*l.*; fee to the apothecary, 1*l.* 1s.; fee to the secretary, 5s.

Students who are desirous of entering to the medical and surgical practice of the hospital, apart from the lectures, for the periods required by the College of Surgeons and Apothecaries' Company, (viz., eighteen months of medical and three years of surgical practice,) may do so by making one payment of 30*l.* This includes the fees of the apothecary and secretary.

Instruction in practical pharmacy, with opportunities of dispensing, is given by the apothecary. Fee for six months, 8 guineas; for twelve months, 12 guineas.

Instruction in pharmacy, in the drug room, without dispensing. For three months, 6 guineas.

Students who may require a more extended course of education, such as is necessary to enable them to become candidates for the diploma of the University of London and the fellowship of the College of Surgeons, may obtain perpetual admission to the medical and surgical practice of the hospital, and to all the lectures delivered in the school, by the additional payment of 3*l.* 3s. at the beginning of the first session, or by a single payment of 78*l.*

Museum.—Curator, Mr. Mitchell Henry, assistant-surgeon to the hospital. The museum is open to students daily, where bones and models are supplied to them for study during the intervals of lecture. Students will have opportunities of making microscopical examinations of natural and morbid structures.

Library.—Librarian, Mr. Teague. Admission to the library and reading-room is included in the fees paid by general students. Occasional students, who desire to make use of the library, may do so on payment of half a-guinea. The library has been considerably enlarged; it now contains an extensive collection of standard medical works, with the various medical periodicals.

Medical Society.—A Medical Society is established under regulations sanctioned by the governing body of the hospital.

For the convenience of students, the authorities of the hospital have made arrangements, by which they may dine with the resident officers, at the Board-room table, and have luncheon in the library. The clinical clerk and dresser of the week dine at the Board-room table.

Prizes.—General examinations for honours are held at the end of each session in the various classes.

Clinical Prizes.—With a view to encourage the habit of investigating and recording at the bedside the phenomena of disease, the physicians and surgeons have instituted two prizes, of the value of 10 guineas each, which will be awarded, at the annual distribution, to the students who shall present the best reports of cases that have occurred in the hospital during the preceding winter session.

Treasurers' Prize.—The annual prize of the value of 10 guineas will be presented by the treasurers of the hospital.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.

SESSION 1850—51.

Hospital Practice.—Physicians: Dr. Wilson, Dr. Nairne, Dr. Page, and Dr. Bence Jones, F.R.S. Assistant-Physicians: Dr. Pitman and Dr. Fuller. Surgeons: Mr. Keate, Mr. Hawkins, Mr. Cutler, and Mr. Tatum. Assistant-Surgeons: Mr. H. Charles Johnson and Mr. Prescott Hewett.

Gentlemen are admitted to the practice of the physicians on the following terms:—Six months, 8 guineas; one year, or the period required by the Society of Apothecaries, 16 guineas; perpetual pupils, 24 guineas; fee to the apothecary, 1 guinea.

Gentlemen are admitted to the practice of the surgeons on the following terms:—Six months, 15 guineas; one year, or the period required by the College of Surgeons, 20 guineas; perpetual pupils, 50 guineas.

Attendance of the physicians and surgeons daily at one o'clock. Surgical operations on Thursday.

Clinical Lectures are given by the physicians and surgeons of the hospital during the winter and summer sessions.

Ophthalmic Surgery.—Patients with diseases of the eye are treated by Mr. Tatum on Mondays and Fridays, at one o'clock.

Practical Pharmacy.—Gentlemen may be instructed in pharmacy, in the laboratory and dispensary of the hospital, on the following terms:—Six months, 12 guineas; one year, 15 guineas.

Clinical Clerks.—The pupils attending the medical practice may become, when qualified, clinical clerks to the several physicians. The pupils attending the surgical practice may become, when qualified, clinical clerks to the several surgeons.

Dressers.—Pupils entering to the surgical practice for twelve months are allowed, when qualified, to dress the patients for three months, and perpetual pupils for six months, without additional fee.

House Surgeons.—The perpetual pupils are eligible to be assistant house-surgeons for six months, and house-surgeon for twelve months, (without additional fee,) when properly qualified for the office.

The Library and Reading-room are open during the greater part of the day. Subscription for the first year, 1 guinea; and 5s. for every subsequent year.

The *Museum* is open daily to the pupils of the hospital.

Regulations respecting Students.—A register is kept, in which the names of all students in St. George's Hospital Medical School, the lectures which they attend, and the certificates which they obtain, may be registered.

The fee for registration is ten shillings.

Students who wish to be matriculated students are required to receive the entire medical education ordered by the College of Surgeons and Society of Apothecaries in the medical school of the hospital, and to be registered in the hospital medical school register. But other students are also strongly recommended to have their names registered,

as the advantage is obvious in being able at any time to obtain certificates, should they be entitled to them.

The attention of students is particularly directed to the following regulations .—

1. Every student must, at the beginning of every session, take out tickets from the Treasurer of the Hospital School, Dr. Pitman, or, in his absence, from the apothecary of the hospital, (to whom all fees may be paid,) for the lectures which he proposes to attend. After the tickets have been registered, they must be taken to the respective lecturers, for their signatures.

2. All certificates must be obtained from the treasurer.

3. Towards the close of the winter and summer sessions, certificates of attendance on the lectures will be prepared for those students who are entitled to them, and will be delivered to them by the apothecary, signed by the treasurer and the respective lecturers of the hospital medical school.

4. Students are particularly requested to give in their schedules to the apothecary as soon as they procure them from the College and the Hall.

5. Certificates will not be granted to those students who neglect to comply with these regulations.

Scholarships and Prizes.—Examinations of those students who are candidates for prizes and certificates of merit will take place at the end of each course.

There will be examinations for two scholarships in 1851.

For one, of the value of 40*l.* a year, and tenable for two years, the subjects of examination will be anatomy and physiology, medicine, surgery, and midwifery; for the other, of the value of 20*l.* a year, and tenable for two years, the subjects of examination will be anatomy and materia medica.

Candidates for the first scholarship must be matriculated students who have been studying in the hospital school for not less than two, nor more than four sessions; who have entered to the medical and surgical practice of the hospital; and who can produce a testimonial, signed by at least three medical officers, that they have conducted themselves with propriety during their attendance at the school.

Candidates for the second scholarship must be matriculated students who have been studying in the hospital school not less than six, nor more than twelve months, and who can produce a testimonial, signed by the lecturers on anatomy and materia medica, that they have conducted themselves with propriety during their attendance in the school.

A student elected to a scholarship will be required to continue his studies at the hospital during the whole period in which he holds the scholarship, unless with leave given by the medical officers to be absent; and, in order to hold it for more than one year, he must produce at the end of the year a certificate of good conduct signed by at least three medical officers.

Sir Benjamin Brodie's Clinical Prize will be awarded to the matriculated surgeon's pupil of the hospital who shall have delivered to the surgeons the best report of not fewer than twelve surgical cases which have occurred in the hospital during the preceding twelve months, each case being accompanied with notes illustrative of the pathology, diagnosis, and treatment.

The reports are not to be in the handwriting of the candidate for the prize, and are to be sent, sealed up, with a motto on the outside of the cover, to the junior surgeon, on or before the 15th of March; and another sealed paper, with the same motto on the outside, and with the name and address of the candidate inside, is to be sent with them.

The papers containing the names of the unsuccessful candidates will be burned unopened, and their reports will be returned when applied for.

Dr Chambers's Clinical Prize will be awarded to the matriculated physician's pupil of the hospital who shall produce the best report of not fewer than twelve medical cases which have occurred in the hospital during the preceding twelve months. The same regulations are to be followed as in the case of the surgical clinical prize, and the reports are to be sent to the junior physician on or before the 15th of March.

Dr. Seymour's Prize.—A sum of 10*l.*, placed by Dr. Seymour at the disposal of the School Committee, will be given to the writer (provided he be a matriculated student) of the best essay on some medical subject. Due notice will be given of the subject selected for the essay.

The essay is not to be in the handwriting of the candidate for the prize, and is to be sent, sealed up, with a motto on the outside of the cover, to Dr. Pitman, on or before the 31st of March; and another sealed paper, with the same motto on the outside, and with the name and address of the candidate inside, is to be sent with it.

Further information may be obtained from any of the lecturers, or from Mr. Hammerton, the apothecary of the hospital, who is authorised to enter the names of students.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE.

SESSION 1850-51.

Hospital practice daily from 12 to 2. Clinical lectures will be delivered regularly twice a week by the physicians and surgeons. *Post-mortem* examinations will be made under the superintendence of the physicians and surgeons; on which occasions pathological demonstrations will be given to illustrate the structural changes effected by disease.

Fees for Attendance.—Medical practice: six months, 10 guineas; twelve months, 12 guineas; eighteen months, 15 guineas; perpetual 20 guineas. Surgical practice: three months, 8 guineas; six months, 12 guineas; twelve months, 20 guineas; perpetual, 30 guineas. Conjoint fee for the period of hospital practice required by the Royal College of Surgeons and the Society of Apothecaries, 26 guineas.

Maternity Charity.—This charity affords attendance to 500 lying-in patients annually. Clinical lectures will be delivered by Mr. Greenhalgh.

General fee to all the lectures required by the Royal College of Surgeons and Society of Apothecaries, 40 guineas, exclusive of practical chemistry. The fees are to be paid to the secretary of the hospital, who will issue tickets of admission to the courses, which must be subsequently countersigned by the lecturers. Clinical assistants, clinical clerks, and dressers, will be selected from the best qualified students without extra fee. Certificates of honour in all the classes will be awarded at the end of each session.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL, LONDON.

WEST STRAND, NEAR CHARING-CROSS.

SESSION 1850-51.

Hospital Practice.—Physicians: Dr. Shearman, Dr. Golding, Dr. Chowne. Surgeons: Mr. Hancock, Mr. Avery.

Medical Practice.—Six months, 10*l.* 10s.; full period required, 15*l.* 15s. *Surgical Practice.*—Six months, 10*l.* 10s.; full period required, 15*l.* 15s. Full period required to both medical and surgical practice, twenty-five guineas.

The physicians and surgeons visit the wards on their respective days between 1 and 2 o'clock.

The cases in the out-patients' department are seen and prescribed for at the hospital daily between 12 and 2 o'clock.

Clinical Lectures.—Medical and surgical clinical lectures are given weekly by the physicians and surgeons of the hospital.

Practical Pathology.—*Post-mortem* examinations are performed in available cases.

The Museum contains numerous instructive preparations of morbid and natural structure, together with a cabinet of materia medica, models, casts, drawings, diagrams, &c., for illustrating the various lectures.

Diligence and regularity of attendance on the practice and classes are expected as a preliminary qualification for the competition for such medals and testimonials of honour as may be awarded at the termination of the session.

Certificates of attendance at this hospital and school qualify for examination, on the respective subjects, at the University of London, Royal College of Surgeons, and Society of Apothecaries.

General fee for all the lectures required by the College of Surgeons and Society of Apothecaries, forty-two guineas; without practical chemistry, forty guineas.

THEATRE OF ANATOMY AND MEDICINE,

1, GROSVENOR-PLACE,

ADJOINING ST. GEORGE'S HOSPITAL.

SESSIONS OF 1850-1851.

Hospital Practice.—Table of Fees for attendance upon the Medical and Surgical Practice of St. George's Hospital:—Medical, six months, 8*l.* 8s.; twelve months, or time re-

quired by examining boards, 16*l.* 16s.; perpetual, 25*l.* 4s. Surgical, six months, 15*l.* 15s.; twelve months, or time required by examining boards, 21*l.*; perpetual, 52*l.* 10s. Apothecary's fee for student's entering the medical practice one guinea. General fee to the whole of the courses required by the Royal College of Surgeons of England and the Apothecaries' Company, including one course of Practical Chemistry, 42 guineas; half of which may be paid on the entrance of pupils, and the remaining half in January, at the commencement of the second division of the course. All students entering to the hospital practice are entitled to attend the Clininal Lectures there delivered; and also to become house-surgeons and dressers when qualified, without the payment of an extra fee. The library and reading-room are open to all students of the hospital upon payment of the usual fee. Medals or prizes, and honorary certificates, will be awarded in each class, and publicly presented on Thursday, May 1st, 1851, at half-past two. Clinical prizes.—Prizes will be awarded by the lecturers of this school, for the best reports of medical and surgical cases occurring in the wards of St. George's Hospital; the competition for which will be open to all the students of the hospital. Printed regulations relative to these prizes may be obtained on application at the school. The microscope will be used to illustrate particular subjects in the lectures upon anatomy, chemistry, and botany. The dissecting-room and museum are open to the students during day-light, where their studies will be superintended by the lecturers on anatomy, and by the anatomical tutors, from ten to half-past three o'clock. Further particulars respecting the school may be obtained at the theatre, 1, Grosvenor-place, or at the residence of the honorary secretary, Dr. W. V. Pettigrew, 7, Chester-street.

HUNTERIAN SCHOOL OF MEDICINE,

1, BEDFORD-STREET, BEDFORD-SQUARE.

ESTABLISHED IN 1822, BY THE LATE MR. DERMOTT.

SESSION 1850-51.

For all the lectures required by the Royal College of Surgeons, Apothecaries' Hall, &c., 32 guineas. Hospital practice, both medical and surgical, together with the above lectures, 57 guineas. The different courses of lectures will be illustrated by preparations; recent specimens of diseased structure; a hortus siccus, and microscopes, with anatomical and pathological drawings. There will also be an ample supply of midwifery patients, not less than 500 cases annually. Additional lectures and instruction on Clinical Obstetrics will be given at Queen Adelaide's Lying-in Hospital. Medical officers of the Army and Navy, and the East India Company's Service, and missionaries, are permitted to attend gratuitously the whole of the public lectures delivered at this school.

House-Pupils.—Resident house-pupils are free to all the lectures delivered in the establishment, and have ample opportunities for acquiring a thorough knowledge of every branch of the profession. They have also the choice of attending the Western Farringdon and Surrey Dispensaries, and the Metropolitan Free Hospital, all which institutions are recognised.

Out-door and In-door Apprentices have opportunities for acquiring theoretical and practical knowledge in every branch of the profession. Their indentures are so arranged as to serve for passing the examinations, both at the College of Surgeons and Apothecaries' Hall; and the full curriculum of study guaranteed for the degree of doctor of the University of London, the London College of Physicians, and the diploma of the College of Surgeons.

A gratuitous course of lectures on some branch of Medicine or Surgery will generally be delivered in each Summer Session. The widow of the late Mr. Dermott has an interest in the school. Prospectuses of the school, and any further information, may be had by application to Dr. Aldis, 1, Chester-terrace, Chester-square; and at 28, Bedford-square, or to any of the lecturers.

CHATHAM-STREET SCHOOL OF MEDICINE. MANCHESTER.

SESSION 1850-51.

The lectures given at this school will comprise complete courses of instruction in all the sciences relating to medicine and surgery.

The school offers the great desideratum of the presence of demonstrators in the dissecting-room, whose special office will be to direct the pupils in their dissections.

The chemistry courses will be illustrated by an extensive exhibition of experiments; and, for the greater convenience of teaching by illustration, arrangements have been made for the lectures to be delivered chiefly in the laboratory. A summer course of analytical chemistry will be given, and the pupils will then have the opportunity of making themselves practically familiar with the details of chemical analysis.

A complete course of instruction in microscopy will be given, and the pupils practised in the application of the microscope to anatomical, physiological, pathological, and diagnostic uses.

The connexion of the different lecturers with the various hospitals and dispensaries, will be the means of affording extensive opportunities to the pupils of prosecuting their practical studies, and for the teaching of auscultation and the modern improvements in diagnosis.

The school offers the opportunity of private dissection during the summer to private practitioners and others who may desire to continue their studies in surgical anatomy.

Every accommodation necessary to the comfort of the pupils has been cared for. The school is situated close to the hospitals.

In accordance with the curricula of the various universities and medical corporations which grant degrees in medicine and surgery, and of the Apothecaries' Society, the session is divided into two terms, viz.:—"the winter term," beginning on the 1st of October and ending in April, and the "summer term," beginning on the 1st of May and ending with July.

Lectures on the various subjects included under the term "medical science," will be given as follow:—

Practical and Surgical Anatomy, by A. W. Dumville, M.R.C.S.—General Anatomy and Physiolgy, by J. Stuart Wilkinson, M.D., M.R.C.S. Eng. and Edin., late Lecturer on Medicine in Edinburgh; John Lomas, M.D.,; and D. C. Berlin, M.R.C.S.—Anatomical Demonstrations will be given in the dissecting-room, by Henry Reid, M.D., M.R.C.S. Edin.; James Bower Harrison, M.R.C.S. Eng.; and Scholes B. Birch, M.D., M.R.C.S.—The Principles and Practice of Medicine, by Thomas H. Watts, M.D. Edin.—Clinical Medicine, by M. A. Eason Wilkinson, M.D.—Materia Medica and Therapeutics, by D. I. T. Francis, M.D., Lond.—The Principles and Practice of Surgery, by Geo. Southam, M.R.C.S., Assistant-Surgeon to the Manchester Royal Infirmary.—The Principles and Practice of Obstetric Medicine, by Thomas Dorrington, M.R.C.S.—The Diseases of Females and Children, by James Whitehead, M.D., F.R.C.S.—Pathology, by S. B. Bennett, M.D.—Forensic Medicine, by J. Aikenhead, M.D., M.R.C.S., Edin.—Chemistry, by Henry Day, M.R.C.S.—Practical Chemistry and Pharmacy. The student will have access to a chemical laboratory, where he will be practically exercised in conducting the various chemical manipulations, and the analysis of organic and inorganic bodies. In this department, medical students, engineers, bleachers, dyers, miners, agriculturists, emigrants, and others going abroad have each the opportunity of engaging in a series of experiments more particularly adapted to their individual pursuits.—Botany, by William Japson, M.D., Edin.

It is intended to admit, on the payment of a small fee, to the private dissecting room during the summer months, members of the profession and others who may feel desirous of prosecuting their studies in surgical anatomy and operative surgery. Connected with the school is a valuable and select museum, and an excellent chemical laboratory. Examinations of the classes will be regularly held by the lecturers. At the end of each session, prizes will be given to those students who exhibit the greatest proficiency in their studies.

TABLE OF FEES.

WINTER SESSION.

	Sessional Course Fee. £	s.	d.	Perpetual Fee. £	s.	d.
Practical and Surgical Anatomy and Demonstrations	4	4	0	6	6	0
General Anatomy and Physiology	4	4	0	6	6	0
Principles and Practice of Medicine	4	4	0	6	6	0
Principles and Practice of Surgery	4	4	0	6	6	0
Chemistry	5	5	0	7	7	0

SUMMER SESSION.

	Sessional Course Fee. £ s. d.	Perpetual Fee. £ s. d.
Materia Medica and Therapeutics	3 3 0	5 5 0
Principles and Practice of Obstetric Medicine, and Diseases of Females and Children	3 3 0	5 5 0
Forensic Medicine and Hygiene	3 3 0	
Practical Chemistry	2 2 0	
Pathology	2 2 0	
Botany	3 3 0	

The composition fee for perpetual admission to all the lectures is forty guineas. All further information respecting fees and other matters will be given by the Registrar of the School, Thomas H. Watts, M.D., 105, Picadilly, Manchester.

THE NEWCASTLE-UPON-TYNE SCHOOL OF MEDICINE AND SURGERY.

SESSION 1850—51.

On the recommendation of the Senate of the London University, the Secretary of State for the Home Department has empowered the University to receive the certificates of this school, for the purpose of graduation in medicine. The lectures are also recognised by the Royal College of Surgeons of England, and Apothecaries' Company, London.

The winter session will commence on Tuesday, Oct. 1, 1850; the summer session will commence on May 1, 1351.

Hospital Practice.—The Newcastle Infirmary, containing 170 beds, where clinical lectures are regularly delivered. During the last year 1426 in-patients, 1682 out-patients, and 1599 casual patients were attended at this institution. Medical and Surgical Practice:—Twelve months, 7 guineas; perpetual, 17 guineas. An extensive library open to the students attending the Infirmary. The museum of the school will be open daily, for the use of students. Conservators, the lecturers on anatomy and demonstrator. Perpetual ticket to all the lectures, qualifying for the diploma of the College of Surgeons, and licence of the Apothecaries' Company, (exclusive of practical chemistry,) 40 guineas. The book of registration will be closed on the 21st of October, and on the 14th of May. Further particulars may be learned from any of the lecturers, and tickets obtained from the Secretary, 1, Eldon-square, Newcastle.—William Dawson, Secretary.—Newcastle, Surgeons'-hall, Manor-street, September 3, 1850.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

The session will be publicly opened on Monday, November 4.

Medicine.—Dietetics, Materia Medica, and Pharmacy, Dr. Christison; Chemistry, Dr. Gregory; Surgery, Professor Miller; Institutes of Medicine, Dr. Bennet; General Pathology, Dr. Henderson; Clinical Surgery, Professor Syme; Clinical Medicine, Drs. Alison, Christison, and Bennett; Anatomy, Professor Goodsir; Natural History, Professor Jameson; Midwifery and Diseases of Women and Children, Dr. Simpson; Practice of Physic, Dr. Alison.

Royal Infirmary, at noon, daily.—Practical Anatomy, under the superintendence of Professor Goodsir; Practical Chemistry, under the superintendence of Dr. Gregory; Analytical Chemistry, under the superintendence of Dr. Gregory.

During the summer session, lectures will be given on the following branches of education:—

Botany, by Dr. Balfour; Histology, by Dr. Bennett; Histology, by Dr. Bennett; Medical Jurisprudence, by Dr. Trail; Theory of Music, by Professor Donaldson; Hindustani, by Professor Liston; Military Surgery, by Sir George Ballingall; Clinical Medicine; Clinical Surgery, by Professor Syme; Comparative Anatomy, by Professor Goodsir; Anatomical Demonstrations, by Professor Goodsir; Practical Chemistry and Pharmacy; Practical Anatomy.

Matriculation.—Every student, in the faculties of arts, law, and medicine, before entering with any professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the matriculation office in the college, every lawful day, from ten till four o'clock. Enrolment in the general album is the only legal record of attendance in the university, except in the case of students of Divinity, who are required to enrol at the Theological Library before applying for tickets from professors in the faculty of theology.

Library.—The library will be open for the purpose of giving out books to students, either on loan or for reference in the hall appropriated for that purpose, every lawful day during the winter session, from ten o'clock a.m., till four o'clock p.m., except on Saturdays, when it will be shut at one o'clock precisely.

Every student applying for books must present to the librarian his matriculation ticket for the session, with the ticket of at least one professor.

Every book taken out must be returned within a fortnight uninjured.

Fee for each course, 4*l.* 4s. For graduation, 25*l.*

N.B.—Information relative to the curricula of study for degrees, examinations, &c., may be obtained, on application to the secretary, at the college.

MARISCHAL COLLEGE AND UNIVERSITY OF ABERDEEN.

FACULTY OF MEDICINE.

The winter session of 1850-51, of six months' duration, commences on Monday, the 4th of November.

Hospital Practice and Clinical Lectures.—Hospital practice daily at ten o'clock, at the Royal Infirmary, which contains upwards of 280 beds. Physicians: Dr. Dyce, Dr. Kilgour, Dr. Harvey, Dr. Nicol. Surgeons: Dr. Laing, Dr. Keith, Dr. Pirrie, Dr. Kerr. Lectures on Clinical Medicine by Dr. Kilgour. Lectures on Clinical Surgery by Dr. Keith. The perpetual fee to the hospital, including unlimited attendance on the clinical lectures, 7*l.* 7s. The resident physicians' and surgeons' assistants are selected from the senior students; fee, 25*l.*, which includes bed and board. The office of dresser is also conferred upon the most deserving students. No fee is charged.

The following subjects are taught during the summer session, of three months' duration:—Botany, Dr. Macgillivray, fee, 2*l.* 2s.; Natural History, Dr. Macgillivray, 2*l.* 2s.; Practical Anatomy and Demonstrations, Dr. Lizars and Dr. Beveridge, 2*l.* 2s.; Medical Jurisprudence, Dr. Ogston, 2*l.* 2s.

The various courses delivered at this University qualify for examination here, and at the Universities of London, Dublin, Oxford, Cambridge, Glasgow, and St. Andrews; the Royal Colleges of Surgeons of England, Edinburgh, and Ireland; the Apothecaries' Hall, London; and the Medical Boards of the Army and Navy, and Hon. East India Company.

N.B. By attendance on classes taught by the medical professors of Marischal College, three out of the four anni medici, required for graduation at the University of Edinburgh, may be constituted.

FACULTY OF ARTS.

Humanity, (first and second classes), Professor Blackie; Greek, (first, second, third, and fourth classes), Dr. Brown; Natural History, Dr. Macgillivray; Mathematics, (first, second, and third classes), Dr. Cruickshank; Natural Philosophy, Professor Gray; Moral Philosophy and Logic, Professor Martin; Practical Religion, Dr. Pirie; Evidences of Christianity, Principal Dewar. Agriculture, Dr. Smith.

Further particulars may be obtained by application to Dr. Cruickshank, the secretary of the University, or to any of the professors.

REGULATIONS FOR GRANTING MEDICAL DEGREES.

Curriculum.—1. Four years of attendance on medical classes, of which two years may be passed at a recognised medical school; but two must be passed in a University, and one of them at least in this University. The attendance, in each year, must embrace not fewer than two medical classes of six months each; or one of six months, with two of three months each. But it will be held equivalent to one of these four years of attendance—first, in a Master of Arts, to have attended one medical class while passing through the curriculum of arts; or secondly, in any other candidate, to have attended a medical class in each of two years, along with classes in the curriculum of arts. The attendance must include the following classes, each for a course of six months—Anatomy, Practical Anatomy, Che-

mistry, Materia Medica, Institutes of Medicine, Practice of Medicine, Surgery, Midwifery; and the following classes, each for a course of three months—Botany, Practical Chemistry, Medical Jurisprudence. In regard to Practical Anatomy, every candidate must produce a certificate that he has dissected all the parts of the human body. 2. Eighteen months of attendance on the medical and surgical practice of an hospital containing not fewer than eighty beds, along with attendance for six months on lectures on Clinical Medicine, and for three months on lectures on Clinical Surgery. 3. Six months of compounding and dispensing medicines in the laboratory of an hospital or of a public dispensary, or of a licensed general practitioner, or of a regular dispensing druggist.

Examinations.—4. There shall be one examination term in each year, commencing on the second Tuesday of April. 5. Every candidate, who is not a Master of Arts, nor possessed of a diploma or a licence in medicine or in surgery, from any authority established by law within the United Kingdom, shall undergo a preliminary examination on the Latin Language (the book to be used being "Celsus de Medicinâ"); on the Etymology of such Terms in the Medical Sciences as are derived from the Latin and the Greek; and on the Elements of Mental Science (the book to be used being "Abercrombie on the Intellectual Powers").

The preliminary examination may be undergone, at the option of the candidate, at any examination term after the expiry of the first session of his attendance on medical classes. 6. Every candidate shall undergo two separate professional examinations; the first on the theoretical, and the second on the practical branches of medical science, as under, viz.:—First examination: Anatomy, physiology, botany, chemistry, materia medica. Second Examination: Medical jurisprudence, midwifery, surgery, practice of medicine. Physiology will comprehend the doctrines of physics, illustrative of animal structure and function. 7. Any candidate that so desires shall be admitted to the two professional examinations at different terms, viz.:—to the first examination, at the end of his third year of medical classes; and, provided he be twenty-one years of age, to the second examination at the end of his fourth year. But no longer interval than two years will be allowed to intervene between the two examinations without a full renewal of the previous one. 8. In order to be received for examination, certificates must have been lodged with the professor of medicine fourteen days before the commencement of the examination term, stating the age of the candidate, what classes he has attended, and that he is of good moral character. Along with such certificates must be lodged a schedule, filled up in his own handwriting, containing a list of them, and specifying such additional branches of education, professional and general, as he may have studied.

Regulations regarding Practitioners.—9. It will be held equivalent to the *curriculum* prescribed in the foregoing regulations, to have obtained a diploma or a licence in medicine or in surgery, from any authority established by law, within the United Kingdom, and to have subsequently attended medical classes in this University during one winter session. The senatus reserves to itself the right of exempting medical practitioners of experience and high respectability, from residence at the University previous to examination. 10. Practitioners who may be exempted from residence, shall undergo two separate professional examinations, which may be taken at the same or at two different terms:—the first examination to include anatomy, physiology, pathology, and therapeutics; the second, practice of medicine, surgery, midwifery, and medical jurisprudence. And the competency of their knowledge, in these branches, will be tested by examination on the following books, viz.:—

Quain's "Elements of Anatomy," by Sharpey and Quain; Carpenter's "Manual of Physiology;" Williams' "Principles of Medicine;" Watson's "Lectures on the Principles and Practice of Physic;" Miller's "Principles and Practice of Surgery;" Churchill's "Theory and Practice of Midwifery;" and Taylor's "Manual of Medical Jurisprudence."

Conferring of Degrees.—11. The degree of Bachelor of Medicine may be conferred on any candidate who has passed the prescribed examinations. 12. The degree of Doctor of Medicine may be conferred on any candidate, after passing the prescribed examinations, who is twenty-two years of age, or any candidate who has been at least twelve months a Bachelor of Medicine of this University. 13. Graduates who have attended the several medical classes in this University will be charged no graduation fees; but from all others the usual fees will be required.

IRELAND.

The medical session in Dublin, usually commences a month later than the session in London, coming in proverbially with the "nuts and apples" of November eve. To the students scattered in the country during the recess, it would be perhaps premature, therefore, to notice yet introductory addresses or school attractions, which once on a time used to be very stormy; and there is no reason to say this year may not be also. The various courses of lectures will differ little from those of last year; and it would be mere waste of paper to publish them, as the student cannot fail to obtain the requisite information more in detail on the spot next month; much curiosity is felt about the provincial colleges, which commenced last session under such favourable auspices, the current having lately turned so very undeservedly against them in certain high quarters. We lately stated their establishment into one university, to be called the

QUEEN'S UNIVERSITY IN IRELAND,

with a chancellor and senate, and courses of graduation. The College of Cork (which may be taken somewhat as the representative of the colleges of Belfast and Galway), nothing daunted, of course, by the recent storm, opens its session on Tuesday, the 15th of October, when we shall, no doubt, have the "industrial resources" of the worthy baronet the President, in full force, to smooth away all difficulties; twelve scholarships in medicine and science, of the value of 24*l.* each, will be conferred, tenable for one year; the scholars elected, eligible, at the end of this period, to be re-elected; from a recent announcement, the M.D. degree of the Queen's University of Ireland, is to entitle graduates to the same privileges as those of any of our other universities. We may take this opportunity, perhaps, of stating, that the teachers of the medical department at Cork College, as well as Belfast and Galway, are possibly among the best in Ireland; and the Cork College, situated in a healthy outlet of the city, reflects much credit on Sir Robert Kane and Lord Clarendon; no expense has been spared in fitting up the various departments, both the medical and chemical departments, as well as the various others of literature and general science, and that anything should now happen to mar their usefulness, would be very much to be regretted. We should deem any interruption to their useful labours at present, in point of fact, a mere piece of folly.

The curriculum of the Queen's University is something peculiar; last year the college session extended to eight months, not six, as in Dublin; six months' dissections, and six months' idleness, were considered very injudicious as regarded mental training and the attention the student should bestow on his labours. In the first year the medical student is required to attend classics, French, mathematics; in the second, chemistry and the different branches of natural history; in the third year he commences his more immediate labours of practice of medicine and its collateral branches. Residence in the colleges is insisted on in only two out of the three sessions. These colleges are cheaper, perhaps, than others, and will be attended chiefly by Irish students who formerly went to Scotland.

TRINITY COLLEGE SCHOOL OF MEDICINE,

or "School of Physic," ranks, perhaps, first in order, in Dublin, of the old institutions. The days of graduation are Shrove Tuesday and the first Tuesday in July. The Anatomical Museum is very good: put together chiefly by Macartney and the present professor, Dr. Harrison, the author of the "Dublin Dissector;" the school, one of the best in Dublin, is generally well attended; the lectures, excellent. The degree of M.B. is that first obtained in Trinity College; the degree of M.D. following at the expiration of three years; the course of education comprises attendance on the following courses of lectures; not more than three to be attended during each of four sessions, beginning, as the other schools, in November. (One year is

allowed, at the discretion of the candidate, at the University of Edinburgh.) The courses of lectures consist of—Anatomy and Surgery, Chemistry, Botany, Materia Medica, Institutes of Medicine, Practice of Physic, Midwifery, with Clinical Lectures at Patrick Dun's Hospital;—a winter and summer course. The Court of Examiners comprise the professor of medicine to the University, the six professors of the School of Physic, and the professor of midwifery. Graduates in Arts are qualified to obtain the degree of M.B. at any of the half-yearly periods of graduation, having obtained, of course, the other necessary qualifications. Candidates without the degree in arts, at the end of six years, from the Hilary examination of the first under-graduate year; the last arrangement will make the degree now more sought after.

This school, by its recent lectures on surgery, is now much assimilated to the other schools; if there has been always, and perhaps deservedly, a *prestige* in its favour, it is because the lectures at Trinity College—especially these on anatomy, medicine, and midwifery—have been always very excellent; and the certificates of the "School of Physic" have been recognised by the first universities; those of Edinburgh, Cambridge, and Oxford—a privilege not granted to the other schools in Dublin. The library of Trinity College, Dublin, is one of the finest, perhaps, in Europe. The Museum of Natural History is exceedingly interesting and valuable also; we were particularly struck with some skulls in it lately, especially that of Swift. The botanical collection, under the able curatorship of Dr. Harvey, is also highly interesting. The museum of the anatomical department, quite at the other end of the College, is also very valuable. With the University of Dublin, are intimately connected the labours of Macartney, Stokes, Graves, Robert Smith, Crampton, Carmichael, Harrison, Wilde, Montgomery, Osborne, Marsh, Carlisle, Barker; with the College of Surgeons, the labours of Houston, Jacob, Colles, Cusack, Kennedy, Carte, MacDowell, jun., Adams, Hutton. The *dii minores* of our Irish school, names not unknown, however, in our periodical literature—Churchill, Neligan, Donovan, Corrigan, Evory Kennedy, Hamilton, Orr.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS,

Like the College of Physicians of London, is confined in a great measure to old practitioners in the city of Dublin. The college has, however, the power to confer its honorary fellowship on its own licentiates anywhere, or on such eminent medical men in foreign countries, as it may consider deserving such a distinction. The license of the King and Queen's College of Physicians in Ireland is highly respectable; somewhat unlike that of the college in Pall-Mall, it is considered equivalent to a medical degree. Candidates who are in possession of a medical degree from any of our universities, (an M.D., for the freshness of the matter, from the College of Galway, in a year or two,) shall be admitted to examination upon such degree by itself. Candidates, except those that have an M.D. degree prior to 1840, are examined on two separate days—one day on anatomy, chemistry, botany, and pharmacy; and on the second, on practice of physic, midwifery, and translating Hippocrates and Galen out of their original Greek; graduates in medicine are required to undergo only the *second* day's examination, and every candidate, except a graduate in arts of Oxford, Cambridge, or Dublin, is required to translate medical cases from English into the Latin language. The fee for license is 30*l*. The "fellows" of this college are chosen from the licentiates of three years' standing; they are required, by statute, to have taken the degree of M.D. in one of the universities of Dublin, Oxford, or Cambridge, or the degree of A.B. in one of these universities, together with the medical education for the license; this, of course, differs little from that at Trinity College for the M.B.: candidates must produce evidence of four years' study, and two courses of lectures each year. The most prominent difference, perhaps, consists in six months dissections, and two years hospital practice, not required by Trinity College; one of these at Edinburgh or Dublin. The hospital certificate must include attendance on the entire practice of the hospital, and on all the clinical lectures delivered in the hospital during such attendance.

ROYAL COLLEGE OF SURGEONS.

Every registered pupil or apprentice shall be admitted to an examination in the College of Surgeons Ireland, for letters testimonal, if he shall have laid before the Court the following documents:—1. A receipt from the bank of Ireland, showing he has lodged to the credit of the college a sum of 10*l*. previous to any examination. 2. A receipt of the same kind for 20*l*. to indemnify the college for letters testimonial. 3. A certificate that he has passed an examination in Greek and Latin. 4. Certificates of four years' study, three of which shall have been passed during winter sessions in Dublin, London, Edinburgh, or Glasgow. 5. Certificates of attendance on a surgical hospital, where clinical instruction is regularly given, containing fifty beds at least, for a period of not less than twenty-four months. 6. Certificates of attendance on a medical hospital for twelve months. 7. Certificates of attendance on three courses of lectures on Surgery, and three courses of Dissections and Demonstrations; three courses of lectures on Anatomy and Physiology; two courses of lectures on Chemistry; one on Materia Medica; one course on Practice of Medicine; one on Midwifery; and one course on Medical Jurisprudence. 8. A thesis in Latin or English, or a series of cases collected in the hospital the candidate has attended, illustrated by observation or comment. The candidate is examined always on *two* several days, in Anatomy, on Practice of Medicine and Surgery; and called on to perform such surgical operations or dissections, and explain such anatomical preparations as the Court may require. The licence of the College of Surgeons, Ireland, ranks higher, perhaps, than that from Lincoln's-inn-square; the curriculum of both colleges, however, differs now very little.

HOSPITALS IN DUBLIN.

The hospitals in Dublin are the following:—1. *Sir Patrick Dun's*, chiefly attended by students whose intention it is to graduate in medicine at the University; its proximity to the Kingstown Railway would make it desirable for any students residing in that locality, or anxious to vary their studies and the close wards of an hospital with the air of the sea. 2. *The Meath Hospital;* another hospital, chiefly medical, also in a healthy locality. This Institution at one time acquired a great reputation by the clinical researches and lectures of Drs. Stokes and Graves; the number of beds is not equal, perhaps, to some of the other hospitals in Dublin; but the ability and zeal always evinced on the part of the different teachers cannot be surpassed. Surgical cases of importance are also found in the wards; Sir P. Crampton and Mr. Porter are the chief surgeons. 3. *The Richmond Hospital.* This is the chief surgical hospital in Dublin—perhaps in Ireland. The wards are clean and well managed, and going through them, one ever recognises the old names and old cases. Pathology is very much studied in the Richmond; and the museum, due to the untiring energies of Messrs. Smith and Adams, contains several very excellent preparations. The hour of visiting is generally about 8 o'clock a.m. The very valuable researches of Carmichael on syphilis, which have produced such a revolution in the treatment of that disease in these countries, were principally carried on in the Richmond Hospital. The Richmond Hospital, and the school adjoining, owe everything almost to the zeal and liberality of this great and excellent surgeon—an example not lost on his enthusiastic admirers and colleagues. The student will be particularly pleased with the *esprit de corps* of the different men of the Richmond,—the practical clinical ability of Dr. Hutton, one of the best surgeons in Dublin—of Mr. M'Donnell, one of the best anatomists—of Mr. Smith, the best pathologist—of Mr. Adams, Mr. Hamilton, and Mr. M'Dowell. The *Hardwicke and Whitworth Hospitals* adjoin the Richmond, separated merely by a grass-plat, and may be regarded as different parts of the same institution. One appropriated to the treatment of fever and contagious diseases, the other to the treatment of the several other medical diseases, very valuable opportunities of study are afforded by these hospitals, which are visited by the students at stated hours. Dr. Corrigan and Dr. Green have been the chief men in this department of the Richmond Hospital. The "Dublin Hospital Reports" contain papers from these hospitals. 4. The next hospital, perhaps, in interest for the treatment of surgical cases, is *Jervis-street Hospital;* bad surgical accidents are found here, depending more, perhaps, on the

vicinity of this hospital to factories and coal quays than on its rather uninviting appearance outside; the lectures and general attendance are quite as good as any in Dublin; and the names of Wallis, Kirby, Harrison, Hunt, and Corrigan have rendered it not a little known in the medical world. 5 and 6. *Mercer's* and *Vincent's Hospitals.*—Smaller, perhaps, than any we have yet alluded to; the former is an old but well-managed institution; the latter, recently established in the most fashionable part of the city by the Sisters of Charity, contains something about eighty beds, the old oak stairs, and very brilliant ceilings, contrast somewhat awkwardly with the suffering and disease of the inmates; but the various arrangements of this very clean hospital, and everything intended for the benefit of the patients, cannot be surpassed. Dr. Bellingham and Mr. O'Ferrall have been the chief attendants, a ward was established at its institution specially intended for the diseases of children, and a dispensary, and operations occasionally, will further interest the student. 7. *Steeven's Hospital*, almost outside the city, contains 200 patients; its distance from all the chief schools, except the Richmond or Carmichael School, which has an hospital of its own, renders visits from the mass of students "few and far between;" the chief operations in Dublin are perhaps seen at Steeven's; distinct wards for syphilitic patients render it also an excellent hospital for studying this class of cases. The Institution is very large, not unlike Guy's Hospital; the chief attendants have been Colles and Cusack in the surgical department, Sir Henry Marsh in the medical; the apprentices of the former attend the wards. 8 and 9. Two excellent hospitals in Dublin for eye diseases, are very worthy the attention of the student; one adapted exclusively to ophthalmological practice, just opened by Mr. Wilde on the ruins of the Old Park-street School; the other the *City of Dublin Hospital*, long known for the excellent practical lectures of Dr. Jacob. The hospital of Mr. Wilde (full of associations of the best private school ever in Dublin) is quite unique in its way; on the plan of the Continental eye hospitals—museum, lecture-room, operating theatre, within the smallest possible space, all complete. Dr. Jacob's excellent practical clinique on eye diseases, at Baggot-street, it would be superfluous to praise. The student cannot fail, indeed, with such opportunities of study this session, to arrive at a sound knowledge of both the theory and practice of eye diseases. 10. Of *Lying-in Hospitals*, the Rotunda is the best in Dublin—the finest institution of the kind, perhaps, in the three kingdoms. Here the student has ample opportunity of engaging in obstetric practice.

REGULATIONS OF THE ARMY MEDICAL DEPARTMENT.

13, ST. JAMES'S-PLACE.

A candidate for an assistant-surgeoncy in the army is required to fill up a blank form of certificate, which may be obtained at the office by written application to the Director-General, specifying by whom he is recommended, his Christian and surname at full length, with the course of study he has pursued. The candidate is, in addition, to sign and forward the following declaration:—

"I [Christian and surname at full length] —— years of age, a candidate for employment in the medical department of the army, do hereby attest my readiness to engage for general service, whether at home or abroad, and to proceed on duty immediately on being gazetted. I declare my age not to exceed twenty-six years, that I am unmarried, and that I labour under no mental or constitutional disease, nor physical disability, that can interfere with the most efficient discharges of the duties of a medical officer in any climate." [Signature.]

In selecting from among the candidates for the medical department of the army, a preference is given to those who can fill up all the blanks in the printed form; but the name of no gentleman can be placed on the list who does not possess the diploma of either of the Colleges of Surgeons of London, Edinburgh, or Dublin, and who cannot produce the following testimonials:—Eighteen months' attendance at an hospital of celebrity, where the average number of in-patients is not less than one hundred; twenty-four months' anatomy; twelve months' practical anatomy; twelve months' surgery, or (what is preferred) six months' surgery, and six months' military surgery; eight months' clinical surgery, a complete course of two or three lectures during the week; twelve months' practice of physic, or six months of practice of physic, and six months of general pathology; eight months' clinical lectures on ditto, the same as required in surgery; twelve months' chemistry; six months' practical chemistry; three months' botany; four months' materia medica; three months' practical pharmacy, or apprenticeship; five months' natural history; five months' midwifery; five months' natural philosophy.

The candidates must be unmarried, not beyond twenty-six years of age, nor under twenty-one years.

Candidates who have had a university education, and have the degree of A.B. or A.M., as well as that of M.D., will be preferred; but a liberal education, and a competent knowledge of the Greek and Latin languages, are indispensably requisite in every candidate; and the greater the attainments of the candidates in various branches of science, in addition to competent professional knowledge, the more eligible will they be subsequently deemed for promotion in the service; for selections to fill up vacancies will be guided more by reference to such acquirements than to mere seniority. Before promotion from the rank of assistant-surgeon to any higher rank, every gentleman must be prepared for such other examination as may be ordered before a board of medical officers.

Although the British schools are specified, it is to be understood that candidates who have received regular education in approved foreign universities or schools will be admitted to examination.

With the exception of practice of physic and clinical medicine by one teacher, candidates must have attended separate lectures for each branch of the science. The certificate of each teacher of practical anatomy must state the number of subjects or parts dissected by the pupil. Certificates of lectures and attendance must be from physicians or surgeons of the recognised colleges of physicians and surgeons of the United Kingdom, or of foreign universities. A certificate that the candidate is acquainted with the art of cupping is required.

Diplomas, tickets of attendance on lectures, and certificates of regular attendance, by each professor, or lecturer, must be lodged at the office for examination and registry, at least one week before the candidate appears for examination, and likewise certificates of moral conduct and character, one of them by a clergyman, and that of the parochial minister, are desirable. Baptismal certificates are required at the same time; if the parish register cannot be resorted to, an affidavit from one of the parents, or some parents who can attest the fact, will be accepted.

All communications to be forwarded "unsealed," under cover, to "the Right Honourable the Secretary at War," with the words "Army Medical Department" at the corner.

Although, in the examination of candidates, gentlemen are expected to be qualified in every branch of study required, they are requested to be particularly conversant in the knowledge of—1. Tropical diseases, and the diseases to which soldiers are most liable. 2. Military surgery, and works on the habits of soldiers and rules of the service. 3. "Cullen's Nosology," being that adopted in all returns and reports. 4. "Willan's Classification of Cutaneous Diseases." 5. The latest authors on the diseases of the eye. They are expected readily to translate a passage from a Greek or Latin author; to be conversant with Baillie and the later authors on morbid anatomy; with Cullen's, Mason Good's, and Gregory's "Practice of Physic," the latter giving an account of tropical diseases, and those most commonly met with in the army; with the works of Hunter, Hennen, Dr. John Thomson, Guthrie, Samuel Cooper, Millengen, Ballingall, Marshall, and Baron Larrey, on "Military Surgery;" with the works of Chisholm, Bancroft, Lind, Blane, Burnett, Johnstone, and Annesley, on "The Diseases of Warm Climates;" but Baillie's "Morbid Anatomy," Hennen's and Ballingall's "Military Surgery," third edition, with his valuable work on "Medical Topography," Guthrie on "Gunshot Wounds" and on the "Eye," and Gregory's "Practice of Physic," should form part of the baggage of every military surgeon.

Candidates, after passing their examination, will not have any leave of absence granted, but will be stationed at Chatham for two or three months, previously to being gazetted; and on their conduct there will depend their obtaining their commissions. The appointment of army assistant-surgeons

rests with the Director-General, by whom the examinations are generally conducted.

NAVAL MEDICAL DEPARTMENT.

ADMIRALTY-OFFICE, SOMERSET HOUSE.

Director-General of the Medical Department of the Navy, Sir William Burnett, M.D., Knt., K.C.H., F.R.S.

Qualifications.—The Right Hon. the Lords Commissioners of the Admiralty having been pleased to direct "that no person be admitted as an assistant-surgeon in the Royal Navy who shall not produce a certificate from one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, of his fitness for that office; nor as a surgeon, unless he shall produce a diploma or certificate from one of the said Royal Colleges, founded on an examination to be passed subsequently to his appointment of assistant-surgeon, as to the candidate's fitness for the situation of surgeon in the navy; and, in every case, the candidate producing such certificate or diploma, shall also undergo a further examination before the director-general of the medical department of the navy, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service," the inspector-general doth hereby signify, for the information of those persons to whom it may relate, that these regulations and directions will be strictly adhered to; and, further, that, previously to the admission of assistant-surgeons into the navy, it will be required that they produce proof of having received a preliminary classical education, and that they possess, in particular, a competent knowledge of Latin; also, that they are of good moral character, the certificate of which must be signed by the clergyman of the parish, or by a magistrate of the district. That they have served an apprenticeship, or have been engaged for not less than six months in practical pharmacy. That their age be not less than 20 years, not more than 24, and that they are unmarried. That they have actually attended an hospital in London, Edinburgh, Dublin, Glasgow, or Aberdeen, for two years, after the age of eighteen, in which the average number of patients is not less than 150. That they have been engaged in actual dissections of the human body twelve months, the certificates of which, from the teacher, must state the number of subjects or parts dissected by the candidate. That they have attended lectures, &c., on the following subjects, at established schools of eminence, by physicians or surgeons of the recognised colleges of physicians or surgeons in the United Kingdom, for periods not less than here understated, observing, however, that such lectures will not be admitted if the teacher shall lecture on more than one branch of science; or if the lectures on anatomy, surgery, and medicine be not attended during three distinct winter sessions of six months each:—

Anatomy, (or general anatomy, twelve months; and comparative anatomy, six months,) eighteen months. Surgery, (or general surgery, twelve months; and military surgery, six months,) eighteen months. Theory of medicine, six months. Practice of medicine, twelve months. If the lectures on the theory and practice of medicine are given in conjunction, then the period required is eighteen months (six months' lectures on pathology, if given at a university where there may be a professorship on that branch of science, will be admitted in lieu of six months' lectures on the practice of medicine). Clinical lectures, at an hospital as above, (or the practice of medicine, six months; and the practice of surgery, six months,) twelve months. Chemistry, (or lectures on chemistry, three months; and practical chemistry, three months,) six months. Materia medica, six months. Midwifery, (accompanied by certificates stating the number of midwifery cases personally attended,) six months. Botany, (or general botany, three months,) six months.

In addition to the tickets for the lectures, certificates must be produced from the professors, &c., by whom the lectures were given, stating the periods (in months) *actually* attended by the candidates. The time also of actual attendance at an hospital or infirmary must be certified, and the tickets, as well as certificates of attendance, age, moral character, &c., must be produced by the candidate immediately on his being desired to appear for examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of assistant-surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the Universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, or London, or who, by possessing a knowlege of the diseases of the eye, and of any branch of science connected with the profession, such as medical jurisprudence, natural history, natural philosophy, &c., appear to be more peculiarly eligible for admission into the service; observing, however, that lectures on these, or any other subjects, cannot be admitted as compensating for any deficiency in those required by the regulations.

By the rules of the service, no assistant-surgeon can be promoted to the rank of surgeon until he shall have served three years in the former capacity, one year of which must be in a ship actually employed at sea; and it is resolved, that not any diploma or certificate of examination from either of the aforesaid Royal Colleges shall be admitted toward the qualification for surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years' actual service; observing, that no one can be admitted to an examination for surgeon, unless he be a member of one of the above-named Royal Colleges; and whenever assistant-surgeons, already in the service, (whose professional education may not be in accordance with the above,) obtain leave to study previously to their passing for surgeon, they will be required, on their examination, to produce testimonials of their having availed themselves of the period of leave to complete their education, agreeably to these regulations.

It is also to be observed, that candidates who may be admitted into the naval medical service must serve in whatever ship, &c., they may be appointed to, and that, in the event of their being unable to do so from sea-sickness, their names cannot be continued on the naval medical list, nor can they, of course, be allowed half-pay.

EAST INDIA COMPANY'S SERVICE.

Regulations for the Admission of Medical Gentlemen into the East India Company's Service as Assistant-surgeons for India.

Age.—The assistant-surgeon must not be under twenty-two years, in proof of which he must produce an extract from the register of the parish in which he was born.

Qualifications in Surgery.—The assistant-surgeon, upon receiving a nomination, will be furnished with a letter to the Court of Examiners of the Royal College of Surgeons, to be examined in surgery, and their certificate will be deemed a satisfactory testimonial of his qualification; but should the assistant-surgeon be previously in possession of a diploma from the Royal College of Surgeons of London, or of the College of Surgeons of Dublin or Edinburgh, or of the College and University of Glasgow, or of the Faculty of Physicians and Surgeons of Glasgow, either of them will be deemed satisfactory as to his knowledge of surgery, without any further examination. He is also required to produce a certificate from the cupper of a public hospital in London, of having acquired, and being capable of practising with proper dexterity the art of cupping.

Qualifications in Physic.—The assistant-surgeon will also be required to pass an examination by the Company's examining physician in the practice of physic, and to produce satisfactory proof of his having attended at least two courses of lectures on the practice of physic, and, above all, that he should produce a certificate of having attended diligently the practice of the physicians at some general hospital in London for six months.

The assistant-surgeon is also required, as a condition to his appointment, to subscribe to the Military or Medical and Medical Retiring Fund, at his respective presidency, and also to the Military Orphan Society, if appointed to Bengal.

The assistant-surgeon is also required, by a resolution of Court of the 21st of May, 1828, to apply at the office for cadets and assistant-surgeons for his orders of embarkation, and actually proceed under such orders within three months from the date of being passed and sworn before the Committee for passing military appointments; he will then be furnished with an order to obtain the certificate of his appointment, signed by the Secretary, for which he will pay a fee of 5*l.* in the Secretary's office.

[We hope to be able next week to insert all those Rules and Regulations of Colleges or Schools which do not appear in this Number.]

PROVINCIAL HOSPITALS, &c.

	Physician Practice.		Surgical Practice.	
Bath Hospital			Dresser and Pupil	£26 5
Birmingham General Hospital	18 months	£12 0	3 years	50 6
„ Queen's Hospital	12 months	10 10	12 months	16 10
	Perpetual	12 12	Perpetual	21 5
„ Lying-in Hospital	3 months	5 5		
Bristol Infirmary	1 year	15 0	1 year	25 0
			Dresser	52 10
„ St. Peter's Hospital	„	20 0	1 year	20 0
Bury St. Edmund's—Suffolk General Hospital	In-door pupils £52 10s. per annum.			
Cambridge, Addenbrooke's Hospital	1 year	10 10	1 year	10 10
Devon and Exeter Hospital	1 year	31 10	1 year	31 10
Gloucester Infirmary	„	10 10	„	31 10
Hull General Infirmary	Perpetual, £23.			
Leeds Infirmary	18 months	15 15	2 years	15 0
	Perpetual	21 0	Perpetual	21 0
Liverpool Infirmary	3 years to both	42 0	Dresser, 1 year	21 0
„ Northern Hospital	„ „	31 10		
Manchester Royal Infirmary	3 years	15 15	2 years	21 0
Newcastle Infirmary	12 months to both	£5 5		
Northampton General Infirmary	12 months to both	30 0		
Shrewsbury—Salop Infirmary	12 months to both	21 0		
Sheffield General Infirmary	1 year	10 0	3 years	21 0
Staffordshire General Infirmary	„	5 5	1 year	5 5
Worcester Infirmary			1 year	31 10
York County Hospital	Perpetual	15 15	Perpetual	15 15

HOSPITALS AND DISPENSARIES IN SCOTLAND.

	Medical Practice.		Surgical Practice.	
Edinburgh:				
Royal Infirmary	1 year	£5 7 6		
	Perpetual	12 17 0		
Surgical Hospital			3 months	£3 3
			6 months	5 5
Maternity Hospital	6 months	£1 3 0		
Lock Hospital			3 months	1 1
Royal Dispensary	1 year	£11 11 0		
New Town Dispensary	6 months	3 5 0		
Minto House Hospital and Dispensary	Perpetual	£6 6		
Eye Infirmary	3 months	1 1 0		
Dispensary	„	1 1 0		
Glasgow:				
Royal Infirmary	Fee to both for 2 years	7 7 0		
	Perpetual	8 8 0		
Aberdeen:				
Royal Infirmary	Perpetual	7 7 0		

HOSPITALS AND DISPENSARIES IN IRELAND.

	Medical Practice.		Surgical Practice.	
Dublin:				
Sir P. Dun's Hospital	12 months	£10 10		
Meath	Perpetual to both	£25 0		
Jervis-street Hospital	12 months	10 10		
City of Dublin Hospital	„	10 10		
St. Vincent's Hospital	„	10 10		
Steeven's Hospital	„	13 13		
Mercer's Hospital	„	10 10		
Richmond Hospital	„	13 13		
Dublin Lying-in Hospital	6 months	£10 10		
	In-door pupil	21 0		
Anglesea Lying-in Hospital	6 months	7 7		
	In-door pupil	13 13		
South-Eastern Lying-in Hospital	6 months	4 4		
	In-door pupil	10 10		
Combe Lying-in Hospital	6 months	£4 4		
	In-door pupil	10 10		
Wellesley Lying-in-Hospital	6 months	6 6		
	In-door pupil	12 12		
Western Lying-in Hospital	6 months	6 6		
	In-door pupil	12 12		
Victoria Lying-in Hospital	6 months	4 4		
	In-door pupil	10 10		
Cork:				
North Infirmary			6 months	5 5
			12 months	8 8
South Infirmary			Fees the same.	
Lying-in Hospital	1 year	5 5		
Eye Infirmary			1 year	£2 2
Belfast Hospital			6 months	1 1
			12 months	2 2
Limerick:				
Barrington's Hospital			1 year	8 8
Maryborough:				
Queen's County Infirmary			1 year	8 8

	Anatomical Demonstrations.	Anatomy, Descriptive and Surgical.	Structural and General Anatomy and Physiology.	Chemistry.	Materia Medica and Therapeutics.	Theory and Practice of Medicine.	Principles and Practice of Surgery.	Midwifery, and the Diseases of Women and Children.	Botany.	Medical Jurisprudence.	Comparative Anatomy.
Barthnlomew's School and Medical College.	Mr Holden and Mr. Coote.	Mr. F.C. Skey, F.R.S.	Mr. Paget	Mr. T. Griffiths	Dr. Leith Roupell, F.R.S.	Dr. George Burrows, F.R.S.	Mr. Lawrence, F.R.S.	Dr. West	Dr. Farre, F.L.S.	Dr. Baly, F.R.S.	Mr. McWhinnie
Charing-cross Hospital.		Mr. Hird and Mr. E. Canton	Mr. Wharton Jones, F.R.S.	Mr. H. H. Lewis, M.A.	Dr. Steggall and Dr. Willshire	Dr. Shearman and Dr. Rowland	Mr. Hancock	Dr. Chowne		Dr. Chowne and Dr. Gavin	
Hunterian Institute of Medicine and Surgery.	Mr. E. J. Chance.	Mr. E. J. Chance.	Mr. J. Chippendale	Mr. Ashley	Dr. G. Smyth	Dr. C. J. B. Aldis	Mr. Riadore	Dr. T. Smith and Dr. R. Barnes	Mr. W. Lewis	Dr. R. Barnes and Dr. Mansou	
Guy's Hospital School.	Dr. Habershon and Mr. Callaway.	Mr. Hilton and Mr. Birkett	Mr. Hilton and Dr. Gull	Mr. Aikin and Dr. Taylor	Dr. G. Bird and Dr. O. Rees	Dr. Addison, Dr. Babington, and Dr. Barlow	Mr. B. Cooper	Dr. Lever and Dr. Oldham	Mr. Johnson	Dr. Taylor	Dr. Gull
King's College.	Dr. Brinton and Mr. Lee.	Prof. Richard Partridge, F.R.S.	Dr. R. B. Todd, F.R.S., and Mr. Bowman	Dr. W. A. Miller and J. Bowman, Esq.	Dr. J. F. Royle, F.R.S.	Prof. G. Budd, M.D., F.R.S.	Prof. W. Fergusson, F.R.S.	Prof. A. Farre, M.D., F.R.S.	Prof. E. Forbes, FRS, FLS	Prof. W. A. Guy, M.D.	T. R. Jones, F.R.S.
London Hospital School.	Mr. Ward	Mr. Adams	Dr. Carpenter, F.R.S.	Dr. Letheby	Dr. H. Davies	Dr. Little	Mr. Luke and Mr. Curling	Dr. Ramsbotham	Dr. R. Bentley	Dr. Ramsbotham and Dr. Letheby	Dr. W. B. Carpenter, F.R.S.
Middlesex Hospital School.	Mr. T. Nunn	Mr. Moore	Mr. C. De Morgan	Mr. T. Taylor and Mr. C. Heisch	Dr. Stewart	Dr. Crawford and Dr. Thompson	Mr. Shaw	Dr. Frere	Mr. Bentley, F.L.S.	Dr. Goodfellow	Mr. Waterhouse.
School adjoining St. George's Hospital.	Dr. W. V. Pettigrew, Mr. G. E. Blenkins, and Mr. Lane.	Mr. Lane and Mr. Blenkins	Mr. Lane, Dr. Pettigrew, and Mr. Blenkins	Mr. Rogers	Dr. Lankester, F.R.S., F.L.S.	Dr. T. Thompson and Dr. F. B. Daniell	Mr. Pilcher	Mr. Bloxam	Dr. Lankester, F.R.S.	Mr. Warder	
St. George's Hospital School.	Mr. Athol Johnson, Mr. Pollock, Mr. Ogle, and Mr. Hornidge.	Mr. Prescott Hewett and Mr. Pollock	Mr. A. Johnson	Mr. Noad.	Dr. Pitman	Dr. Nairne and Dr. Page	Mr. Tatum	Dr. Robert Lee, F.R.S.	Mr. Henfrey, F.L.S.	Dr. Fuller and Mr. H. C. Johnson	
St. Thomas's Hospital School.	Mr. Rainey and Mr. Grainger.	Mr. Clark	Mr. Grainger	Dr. Leeson.	Dr. Risdon Bennett.	Dr. Barker	Mr. Green and Mr. South	Dr. Waller	Mr. G. Luxford	Dr. Leeson and Dr. Bennett	Dr. E. Meryon
University College Medical School.	Mr. G. V. Ellis and Mr. Briggs	Mr. Ellis	Dr. Sharpey, F.R.S.	Mr. Graham, F.R.S.	Dr. Garrod	Dr. Walshe	Prof. Erichsen	Dr. Murphy	Dr. Lindley, F.R.S.	Dr. Carpenter	Dr. Grant, F.R.S.
Westminster Hospital School.	Mr. B. Norman.	Mr. Holthouse	Mr. Hillman and Mr. Brooke, F.R.S.	Mr. H. Lewis, M.A.	Dr. Basham	Dr. Roe and Dr. Basham	Mr. B. Phillips, F.R.S., and Mr. B. Holt	Dr. F. Bird	Dr. Radcliffe	Dr. Fincham and Dr. Tanner	

PROVINCIAL SCHOOLS.

Bristol Medical School.	Mr. Prichard, Mr. J. G. Swayne, Mr. Brittan, and Mr. S. H. Swayne	Mr. Prichard and Mr. S. H. Swayne	Mr. Brittan	Mr. Herapath	Dr. Staples	Dr. Budd and Dr. Stanton	Mr. Clark and Mr. Prichard	Dr. J. G. Swayne	Mr. Rootsey and Mr. Brittan	Dr. Kay and Mr. Herapath	
Leeds School of Medicine		Mr. Price	Mr. Teale, Mr. Nunneley, Mr. Ikin, and Mr. S. Hey	Mr. Morley and Mr. E. Joy	Dr. Pyemont Smith and Dr. Heaton	Dr. Chadwick	Mr. Hey and Mr. Garlick	Mr. Smith and Mr. Braithwaite	Dr. Heaton	Dr. Pyemont Smith	
Manchester School of Medicine and Surgery	Mr. W. Smith	Mr. W. Smith	Mr. Turner	Mr. F. C. Calvert	Dr. Ainsworth	Dr. Browne	Mr. Ransome	Mr. Heath	Mr. Just and Dr. Hardy	Dr. Renaud	
Queen's College, Birmingham	Mr. D. Bolton	Mr. W. Sands Cox, F.R.S.	Mr. Langston Parker	Mr. Shaw	Dr. James Johnstone and Mr. G. B. Knowles	Dr. John Eccles	Mr. W. Sands Cox, F.R.S.	Mr. Sam. Berry	Mr. G. B. Knowles, F.L.S.	Dr. J. Birt Davies	Prof. Parker

MEDICAL NEWS.

Military Appointments.—20th Regiment of Foot—Assistant-Surgeon Philip Whiteside Maclagan, M.D., from the Royal Canadian Rifles, to be Surgeon, vice Blake, deceased. 71st Foot—Acting Assistant-Surgeon Richard Cooper Todd, to be Assistant-Surgeon, vice Woolfreyes, appointed to the Royal Canadian Rifles. Royal Canadian Rifle Regiment—Assistant-Surgeon John Andrew Woolfreyes, from 71st Foot, to be Assistant-Surgeon vice Maclagan, promoted.

Naval Appointments. — Surgeon Edward Davies, M.D., (1841,) to the Hecate steam-sloop, at Portsmouth; Surgeon John Coulter, M.D., (1834,) additional to the Impregnable flag-ship, at Devonport; Assistant-Surgeon Edward W. Prichard, (1846,) recently additional to the Asia, flag-ship, on the Pacific station, to the Hecate; Patrick Slevin, (1841,) recently Assistant-Surgeon to the Thetis, 40, to be additional Assistant-Surgeon to the Impregnable; Walter Lawrence, (1841,) to be additional Assistant-Surgeon to the Portland, 50, at Devonport.

Assistant-Surgeons in the Navy.—The naval intelligence in the *Times*, of the 25th inst., contains the following paragraph:—"The Dragon steam-frigate, Captain Giffard, remains at Spithead. The reason her assistant-surgeon has no cabin is, that the Admiralty have not ordered one to be constructed for him, and the Dockyard cannot build one without such orders. Captain Giffard has no influence in the matter. The Admiralty yielded submission so reluctantly to the justice of the case of the assistant-surgeons, that we are not surprised they retard the fulfilment of the order as much as possible."

The anthorities of the city of Edinburgh are about to erect public slaughterhouses at Lochrin, on ground belonging to Alex. Haig, Esq. The site is so close to the canal, that the manure can be taken away direct by the canal-boats: from the immense supply of water, together with the excellence of the regulations, neither smell nor anything offensive would result to the neighbourhood. This important sanitary measure is spoken of as being one of the greatest physical and moral improvements that have taken place in Edinburgh during the last hundred years. Lochrin is in the immediate vicinity of the cattle market. The new slaughter-houses will cover a space of four acres.

Poisoning by Savine.—An inquest has been recently held, by Mr. Baker, in Kingsland, on the body of a married woman, named Harriet Cole, aged 34, when the evidence proved that death had been caused by her taking a decoction of savine-leaves, to procure abortion. The drug had been obtained from a herbalist, whom the summoning officer stated to be in the habit of selling it daily. The coroner remarked, that there was no law to prevent a person selling it; but he thought some steps should be taken to check its indiscriminate sale, as a person selling it might be liable to a verdict of manslaughter. The jury returned a verdict as follows:—"That the deceased died from inflammation of the bowels, caused by taking decoction of savine; and the jury cannot separate without expressing a strong opinion that great blame is attached to herbalists and others indiscriminately vending such articles."

Sickness has been very prevalent among Her Majesty's troops on service in China; as many as 160 men were in hospital at one time; and about thirty-five are dead of fever. This happened when there was not any unusual sickness, either among the community or the Government police force. In 1848, the 95th Regiment, from illness and the number in hospital, were declared unfit for duty; about 100 were carried off in a short space of time. Some attribute the cause of this to the unhealthy position of the barracks; others, to the crowded state of their rooms, especially at night—their beds being only six inches apart.

Epidemic Diseases.—Cholera still prevails at Malta. Up to the 14th Sept., there were 2,813 cases, and 1,502 deaths. The Bellerophon was recently ordered for England in consequence of this disease breaking out among the crew. Four seamen were attacked on the 12th, and sixteen more on the 13th; several of these are dead. It has nearly subsided in Egypt. From June 9 to August 26 there have been 2,435 cases and 1,321 deaths. It has since appeared in Cephalonia, where there occurred 24 cases and 10 deaths, from the 27th of August to the 31st. Eighteen deaths from cholera occurred from the 1st to the 4th of September. There have been altogether 70 cases, 34 of which have terminated fatally. A suspicious case has occurred at Lante. Gripoli is still infected; Tunis is nearly free. In Milwaukie, Wis., U. S., a destructive epidemic, somewhat resembling cholera, but supposed to be a kind of malignant dysentery, made its appearance, causing 109 deaths in two days. It is confined, in a great measure, to the German population of the city.

TO CORRESPONDENTS.

Communications have been received from Dr. Jenner, of Albany-street, Eleventh Paper on "Fever;" Mr. Hunt, of Bedford-square, Third Paper on the "Medicinal Action of Arsenic in Cutaneous and other Diseases;" Dr. Maund, of Harlow, "Ganglion Treated by the Lanceolate Director;" Mr. A. C. MacLaren, of Harley-street, "Remarks on Dr. Roe's Papers on Cholera in Plymouth;" Chemicus, "Remarks on Mr. Oxland's Method of Refining Sugar by the Acetate of Alumina; A Subscriber; Dr. Campbell, 55th Regiment, "Notes on the Topography and Diseases of Scinde;" A Friend of the late Mr. Crosse of Norwich; Mr. Leigh, of St. Ives; Mr. Waldron Bradley, of Kidderminster; Mr. Henry Smith, of Caroline-street, "Case of Ligature of the External Iliac;" Professor Edward Forbes, of King's College; Mr. Thomas Mee, Surgeon (!); Dr. Tunstall, Physician to the Eastern Dispensary, Bath, "A Case in which Sudden Death followed the long-continued use of Carbonate of Soda;" Mr. Ebsworth, "Pauper Practice, No. III.;" Dr. Rawson, of Liverpool, on the "Liability of Poachers to Disease of the Heart;" Mr. Walsh, of Half Moon-street, on "Insurance Office Fees;" Mr. Stocker, of the London Hospital; Dr. Parker, of the London Hospital, "On Concussion of the Brain."

Royal Medical and Chirurgical Society.—We were anxious this week to have had a short say anent the Royal Medical and Chirurgical Society; and also to have published the first of a series of important letters from an eminent Fellow upon its proceedings and regulations. Unfortunately, however, our "Students' Number" obliges us to postpone, till next week, the fulfilment of our intentions. Let us here, however, briefly state that the repairs in Berners-street are nearly completed; that the Library will be re-opened on the 30th; and that the room, formerly the Council-room, is to be appropriated for the use of those Fellows who may wish to read or to write free from the annoyance of conversation necessarily occurring in the Library; that all the ventilation improvements possible to be effected with the present mode of lighting have been made; and that the first meeting will take place on the 12th of November. We hope to return to the subject next week.

The Union Surgeons and their interests have not been forgotten by us. We have devoted much and very anxious thought to their cause, and will shortly lay our views upon the subject before the Profession.

Medical Protection Society.—We are prevented by want of space from inserting this week a Report of a meeting of the members of the Medical Protection Office, which took place at the Freemason's Tavern, on Friday the 20th. The Report, which lies before us, fills our mind with surprise and pain, for we could scarcely have believed that transactions of so disgraceful a character as those elicited by the cross-examination of the functionaries of the office, could have been carried on for so long a period without awakening the suspicions of the members. A more rigid scrutiny of the affairs of the office should yet be made, so that the actual amount of debts due from the manager to the members should be clearly ascertained. It is reported that the managers have rejected the authority of a committee of inquiry appointed by the members at the meeting, and have privately got up a provisional committee, with a view to carry on the society upon an amended footing; but, before this is done, the honest course would be to appoint an accountant to draw up a trustworthy balance-sheet. We shall refer to this subject more at large next week.

H. M.—We believe not.

Messrs. Waldron and Thursfield, of Kidderminster.—Our "Students Number" prevents our publishing this week letters relating to the matter in dispute between these gentlemen.

We trust *Calpurnius* will allow us to append his name to a short series of papers on "Man Recent and Fossil; or Traces of the History of Man." We hope to commence their publication in an early Number.

Dr. Maund, of Harlow.—We shall have great pleasure in engraving Dr Maund's drawing of the lanceolate director, and publishing his communication.

A Subscriber may consult with much advantage, Dr. J. Williams' Prize Essay (University of Edinburgh,) on the "Anatomy, Physiology, and Pathology of the Ear." It contains very interesting and useful information.

Dr. Campbell, 55th Regiment.—We have received some interesting papers from Dr. Campbell, who is, we believe, one of the most experienced medical officers in Her Majesty's service. He served some two and twenty years in India, Egypt, and the West Indies. Of these we shall publish at present that on the "Topography and Diseases of Upper Scinde." Dr. Campbell is of opinion that yellow fever is *not contagious*,—a question very much mooted at present in medical and military circles. Dr. Campbell accompanied Sir Charles Napier in his Indian campaigns.

Mr. Thomas Mee, Surgeon.—The "document" sent does indeed "speak volumes." It tells us also of a very impudent quack.

Mr. Henry Smith's most creditable "Case of Successful Ligature of the External Iliac" shall be inserted in our next publication.

Our Anti-Psychological friend must not be alarmed.

LECTURES

INTRODUCTORY TO

THE LONDON COURSE OF MEDICAL STUDY.

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.,

SURGEON TO THE HOSPITAL.

Gentlemen,—In compliance with the request of our excellent treasurer, I have undertaken the arduous task of delivering to you the Introductory Lecture to the present medical session. I acknowledge that I flinch somewhat from the duty, because I am fully sensible of the importance of everything which is undertaken being well accomplished, and I feel myself incompetent to its just fulfilment. I am aware that it is no easy matter to place before my hearers (particularly those who are now for the first time entering into their professional career) an abstract of the studies and duties to which the medical student is called upon to devote himself; to point out the means whereby difficulties may be surmounted, and the general course of application and conduct most likely to lead to ultimate success. Moreover, I find all my difficulties increased, when I reflect that last year the place which I now occupy was filled by Dr. Addison, whose eloquent address on that occasion must still, I am sure, be fresh on the memory of those who were fortunate enough to hear him.

In the opening address to a medical session, in which many of you are for the first time entering upon the study of the different branches of learning requisite to acquire a knowledge of medical science, it may be expected that I should begin with an account of the subjects to which your attention ought chiefly to be directed; but, gentlemen, although it is my intention to do so at a more advanced part of my lecture, I must at the present moment indulge in a few remarks preliminary to those considerations. It is particularly to those gentlemen who now appear for the first time in this theatre, who have, in fact, just crossed the threshold of the temple of medicine, that I wish to address myself. Firstly, then, gentlemen, I would advert to the advantages which are offered to you in this noble institution; to the facilities which its governors, in every way in their power, afford you; and to the opportunities you here possess of acquiring a thorough knowledge of every branch of your profession; but, were these advantages even tenfold, it is not upon them alone that you can depend. In fact, they can avail you but little, unless you are determined, by individual exertion and unremitting industry, to overcome the obstacles which must arise. Amongst the teachers of medicine, as well as those of other sciences, there are some who profess to disclose a shorter path to the acquirement of knowledge than that of industry; and in the study of this, as well as other subjects, many expedients have been devised, by which the labour of research may be saved; but do not permit yourselves to be lulled into indolence by such specious promises. Excellence is seldom, if ever, granted but as the reward of labour. We are all, I fear I must confess, naturally prone to indolence, and to shrink from difficulties, rather than to combat and overcome them; and it certainly evinces no small degree of strength of mind to persist in the path of industry uncheered by the animating pleasure of perceiving the advancement made: in the commencement of your studies you must expect this to be your fate; the hand of the clock unerringly accomplishes the circle of the hour, yet so gradually, that its motion escapes observation. So you must be at first satisfied to store your minds with general principles, and they will require time for accumulation, arrangement, and adaptation, before they *can be applicable to any purpose* whereby they can be rendered useful either to yourselves or to others. Knowledge, suited to benefit mankind, can only be acquired by degrees; and its applicability results from its cumulative influence on the mind: it is by the gradual addition, rather than by any sudden accidental acquirement of facts, *however* important, that your minds can become properly cultivated. Philosophers have said, that "a little knowledge is a dangerous thing." I would not, however, have you misinterpret this saying, or you will incur great danger from the dogma itself,—for it is only by the progressive attainment of facts that useful knowledge can be arrived at, and the danger exists rather in the application,—the use which may be made, of slender acquirements, than in the minimum extent of the acquirement itself. Ignorance rarely seeks knowledge, but one single fact *earned* excites the mind to further inquiry. They knowing little, and being yet aware there is much to know, naturally feel impressed with humility; but are at the same time stimulated by the desire to learn, and to improve their understandings. You alone, gentlemen, can cultivate your own intellectual powers; you must reason, observe, and investigate for yourselves, and not remain satisfied with the first impression any new fact may produce on your minds, until, by mental analysis, you have arrived at a just estimation of its value; for, according to Bacon, all deductions must be drawn after the comparison of a sufficient number of facts, a due regard being had to objections. It is true, knowledge may be acquired by industry, but to gain wisdom is a work of infinite labour. It has been said by Dr. Gregory, that "it is as unreasonable to hope to acquire wisdom without undergoing the necessary labour for its attainments, as it would be to expect that an acorn should become an oak without passing through the ordinary process of vegetation. The acquirement of the requisite knowledge for your profession must not, however, be regarded as only to be achieved by a few gifted minds. Industry and continued application will overcome every obstacle; but let me again repeat that you must not hope to jump suddenly into the possession of the requisite learning. Nothing good or great can be arrived at without a struggle, and you must be satisfied to proceed slowly, so long as your progress is tending determinedly towards the great object, upon the attainment of which you have now entered. In fact, every blessing which is bestowed upon us seems to be awarded as a recompense for the due efforts towards its possession. You must strive, therefore, to overcome all the difficulties you will have to encounter; and thus, and thus only, can you build up your knowledge, perfect your nature, and augment your happiness, by rendering yourselves competent to be useful to mankind. Dwell seriously, gentlemen, upon the important task you have all of you, I hope, voluntarily undertaken, namely, to learn a profession, the object of which is the preservation of health, and the relief of suffering humanity. It is universally acknowledged that health is the greatest boon bestowed by heaven; and the science which tends to its preservation, must be esteemed as the highest to which the human mind can be directed. In all countries and in all ages the physician has been regarded with reverence; and in the pages of holy writ we are told, "Honour a physician with the honour due unto him, for the uses which ye may have of him, for the Lord hath created him."

The studies connected with medical science are, as I have said before, arduous and varied; and it will be my pleasing duty, in conjunction with my coadjutors in this hospital, to do everything in my power to smooth the path to knowledge, and to facilitate your attainment of that reward which awaits all who have, by mental exertion, culture, and discipline, rendered themselves competent to extend the benefits arising from their intellectual acquirements towards the preservation of health.

Having ventured upon these remarks, I shall at once proceed to explain to you, in the clearest manner I am able, the mode in which you should proceed in the pursuit you are embarked in, and, I conscientiously believe too, with a fair certainty of success, if you do but steadily and diligently follow the plan of study marked out for you by your teachers. At first you must be wholly occupied in the acquirement of knowledge communicated to you by others; and you will, I fear, be dismayed at the numerous subjects to which your minds have to be directed. You have only to remember, however, that the instruction imparted to you by each teacher in his own department, although different in kind, has a mutual connexion; and it is the relation of collateral branches to each other, justly estimated, which gives a consistent form to science. "*Omnes medicinæ partes ita connexæ sunt, ut ex toto separare non possunt.*" The Roman fasces unbound were but single rods, the instruments of punishment; but, when gathered together, they were the symbols of strength and power. Thus

it is with respect to the study of medicine; but, as you acquire daily an additional knowledge of facts, you will imperceptibly learn to distinguish the relations which they bear to each other. You have already, in the course of your education, imperceptibly gone through a very similar ordeal in the acquirement of your native language. The declension of the substantive, the conjugation of the verb, the just estimation and distinction between the adjective and adverb, were all matters of mystery to you for years, for the construction of a language is a deep and difficult science, and beyond the comprehension of youth; but, as your minds became developed, and your stock of knowledge increased, you lost sight of the abstract consideration of each grammatical fact, and the formerly considered mere jargon of scholastic discipline became suddenly converted into that power of giving expression to ideas which constitutes the proper order of speech.

A most important consideration to secure your success is a just estimation of the value of time. Many of you have, perhaps, but a limited portion remaining for the completion of your studies; and even you, who have years before you, have not a moment to squander in idleness. Do not, therefore, rely upon the hope to be able to fill up the deficiencies of your knowledge after you have entered upon the practice of your profession; for, unless you are diligent now in the study of its principles, your ignorance will, in all probability, remain invincible; you can never recal lost opportunities, and the fulfilment of your ultimate intention must almost invariably prove abortive.

This, gentlemen, is a most serious consideration. Only picture to yourselves the consequences of such neglect when placed in a position of responsibility beyond what you find yourselves competent to sustain. Then, but too late, will arise repentance, bitterness, and remorse, for time misspent, all which may be avoided by a little present exertion. Do not, therefore, I beg of you, sacrifice your future interests by misuse of the time and talents which God has bestowed upon you—by their prostitution to unworthy objects—but endeavour, by every means in your power, to acquire clearness of perception, to amass facts, to correct your judgment, to strengthen your memory, and to restrain your imagination. Such a moral discipline is most necessary to us all; and I acknowledge it requires some exertion to maintain in a state of vigilance these higher qualities of the mind, and to keep in due control the more lively and more agreeable flights of the imagination, which at best, however, only construct a temporary instead of a durable edifice.

You may naturally inquire, of the many subjects to which you have to direct your attention, with which you should begin, and, with me as your adviser, you may be inclined to believe that I should give the preference to surgery in its more comprehensive sense; nor can I say that I should direct you unwisely were I so to determine; for the education of a surgeon is no longer limited to the methodical application of the hand and instruments,—it has become actually necessary for him to make himself acquainted with the laws of the animal economy, and, indeed, everything relative to the science of medicine, that he may acquit himself judiciously in his own department. I may tell you, gentlemen, with equal truth, that a due knowledge of the theory of surgery is no inconsiderable addition to the character of a good physician; for such is the reciprocal action and re-action between local and internal derangements, between the exterior or surface of the body, and its vital centre, that I conscientiously believe the duties of the surgeon and physician are inseparable—"*Ergo eundem quidem hominem posse omnia ista præstare concipio; atque ubi se diviserunt, eum laudo, qui quam plurimum precipit.*" Influenced by these considerations, I the more strongly recommend you to apply your minds, not only to the study of manual operations and topical expediencies, but to learn diligently the effects of internal remedies, and the means to alleviate the constitutional derangements arising from external influences; for, as the surgeon cannot expect always to command the advice of the physician, to render himself competent to the duties of his profession, he should be a physician himself. Indeed, throughout Europe, excepting in England, the best surgeons have been doctors of medicine, and, at the same time, the best physicians; for the education necessary for a good surgeon will surely equally adapt him to the exclusive practice of physic. A disorder, apparently constitutional, is indeed so frequently cured by the removal of a local source of irritation, and an external disease so often benefited by appropriate constitutional remedies, that it becomes equally necessary for the administrator to either to comprehend the pathological considerations of both, or otherwise the physician and surgeon must be in continual consultation.

As the healthy condition of the exterior of the body depends upon the due performance of the vital functions, upon the integrity of the centre of animal life, "life being, as it is said, the sum of all the functions by which death is resisted," it is clear that one of the best preliminary studies to a medical student must be to render himself fully conversant with the attributes of health; for, if his aim on the one hand be the preservation of health, or, on the other, its restoration when deteriorated, it is self-evident that he ought fully to comprehend all its indications before he can appreciate the deviations to which it is obnoxious. It is true, that it has been ordained by the Almighty, that in the constitution of the physical world, human life should not not only be precarious as to its duration, but exposed at every hour to a variety of ills, demanding all the energies of human knowledge for their temporary prevention or cure. "Nascentes morimur finisque ab origine pendet." It is seldom, however, that life is at once annihilated, unless by some accidental violence; generally death is preceded by a long train of symptoms indicative of some departure from health, which constitute disease in its varied forms; although they may not lead to dissolution. The steps by which health passes into disease are frequently so slow, and the progress of the disorder so insidious, or the seat of the deterioration so deeply placed in the organism, that great practice alone can prove sufficient to enable the medical practitioner to arrive at a just conclusion respecting its nature and importance in relation to life. Indeed, it is even a study to recognise health itself, to say where health ends and disease begins, and I cannot direct your attention to the subject more expressively than by quoting the following description of a sound man from Dr. Gregory's Conspectus,—"Quod ad hoc vero attinet, validissimum et fere sanissimum est corpus justæ magnitudinis, et bene formatum, neque procerum nimis, neque breve, neque macrum, neque multa pinguedine grave, sed quadratum potius quam gracile, et amplo imprimis thorace latisque humeris instructum; cui ossa grandiora sunt, et musculi torosi, bene expressi, et firmi, et fortes, nunquam tremuli; et cutis mollis, quasi humida, nunquam arida, et color, præsertim vultus, bonus et constans, sive is pulchrior fuerit, sive fuscior, dummodo neque ad flavum, neque pallidum vergat; et vultus vegetus et hilaris, et oculi nitentes et vividi; et dentes integri et fortes; et gressus firmus artubus corpus bene sustinentibus; et incessus erectus, et exercitatio omnis facilis, et labor tolerabilis, quamvis diuturnus et gravis; et omnia sensuum organa ad sua munera probe valentia, neque torpidida neque nimis acriter sentientia; et somni leves et diuturni, haud faciles ruptu, qui corpus multum reficiunt, et somnüs vel prorsus carent, vel saltem horrificis; et vel placida quicte et jucundis vitæ oblivüs penitus sopiunt, vel gratis imaginibus animum suaviter recreant. Sani porro corporis indicia sunt. Sanguinis motus temperatus, et pulsus arteriarum validi, pleni, molles, æquales, neque nimis frequentes, neque tardi, neque facile præter solitum incitandi; et respiratio plena, facilis, lenta, parum perspecta, neque multum ab exercitatione quivis accelerata; et vox fortis, et sonora, et in viris, gravis, haud facile rauca facta; et halitus oris, gratus, saltem omni fœtore carens, et os humidum, et lingua nitida, non vero nimis rubra; et cibi appetitus magnus, nulla condimentorum ope egens; et sitis modica; et concoctio omnis escæ, facilis et bona, sine ructu, aut ventriculo ullo modo gravato; et excretio per alvum naturalis quotidiana, et urina justum tempus facile retenta, et cum tempus demum est, facile reddita; et quamvis varii coloris, et crassitudinis et copiæ, sedimentum idoneum suo tempore deponens; quo tardius, eo fere melius; et exhalatio per cutem libera et constans, citra vero sudorem, nisi validæ causæ concurrant; et secretiones internæ pariter constantes et liberæ, neque nimiæ, neque nimis parcæ. Sani denique hominis est, Venerem appetere, et ad eam valere, et sobolem procreare."

Having thus learned what are acknowledged to be the attributes of health, let me now point out what ought to be, in my opinion, the next step in the progress of the student. The functions of every organised being, no matter how low in the scale of creation, are performed through the medium and instrumentality of certain complicated systems of appa-

ratus, competent to effect each some definite purpose. Both in plants and animals such apparatus or organs are alike found; and it is to their operation that the maintenance of those processes is due, from which results that mysterious and unexplorable condition termed vitality. In the higher animals, especially in man, the organs of the body are numerous and complicated in their composition and character, according to the functions they are destined to perform in the animal economy, and their due and natural action depends upon their healthy condition. As it is necessary, before the mechanist can rectify the deficiencies of a worn or injured machine, that he should become thoroughly conversant with its structure, so, gentlemen, is it equally necessary, before the medical philosopher can enter upon the treatment of disease or injury to the human organism, that he should make himself fully master of its structure, and the relative position and connexion of its parts. This study constitutes that branch of medical science called Anatomy. In its most restricted sense, anatomy signifies dissection; but it is more usually held to include the consideration of all organised matter, and, as some author has well said, may, indeed, be regarded as the science of organization.

As the human frame is made up of parts very different to each other, but, at the same time, more or less essential to the well-being of the whole, the study of anatomy necessarily ought to form the very first subject of the student's attention; and suffer me most earnestly to impress upon your minds the importance of this study, as the foundation upon which alone a knowledge of the other branches of the medical profession can be sustained. It ever, indeed, must be considered the basis of every branch of medicine; and it is to anatomical investigation that physiology and pathology owe their advancement to the prominent position they now hold. There is no department of our profession which can claim exception from the obligations due to anatomy. It is the guiding-star of the surgeon during his operations; and an acquaintance with its principles furnishes the physician with a confidence, in no other way to be obtained, in the treatment of internal and hidden lesions. The discoveries in anatomy have done much towards clearing away the mists of hypotheses and speculations which have so long fettered medicine; and it is from continued investigations in this branch of science that we may hope yet to see the practice of medicine divested of empiricism, and become classed in the category and rank of the exact sciences. The object of the study of anatomy is twofold: it must be made subservient to the investigation of the structures of the body both in health and disease. As I have already said, the consideration of the appearances of the different organs, and the tissues of which they are composed, as well as the functions of each organ in a state of health, forms the first subject for the notice of the student. The variations in the state of these organs or their tissues, under the influence of disease, will form the subject of future inquiry. This latter branch of study is termed morbid anatomy. Now, gentlemen, as the anatomy of the body in health is the source of all that is positively known in human physiology, so must we regard morbid anatomy as the most essential element in the study of pathology. But, gentlemen, at first you are expected to deal only with the anatomy of health, to study the forms of parts, their relative position and structural peculiarities; and this, I must again urge upon you, is a study of so much importance in respect to medical acquirements generally, that during the first year of your pupilage, I think it deserves almost exclusive attention at your hands; and, indeed, through the whole term of your studentship no opportunity should be permitted to escape whereby you may improve and perfect your knowledge in this essential branch of science. Having acquired a sufficient insight into anatomy, it is now necessary for the student to pass on to the study of other branches of science accessory to that of medicine, and physiology follows naturally upon anatomy; first, because physiological deductions are for the most part founded upon anatomical facts; and, secondly, because physiology treats of the functions of the various organs with which the student has by this time become acquainted, through the medium of anatomy. It is by physiology we learn that the function of the stomach is to prepare the food to be converted into blood, that of the liver to secrete bile, and that of the kidneys to withdraw excrementitious matter from the system, in the form of urine. It is by means of physiological researches that the process of digestion has become tolerably intelligible, and that we can understand the nature of the effects produced on the system by different kinds of food, and by medicinal agents. Without a knowledge of the principles of physiology, that of anatomy would be useless, for anatomy, as I have said before, treats only of the structure and the relationship of parts, while it is physiology which teaches what those parts are capable of effecting under the influence of vitality.

Of late years the advances in physiology have been extremely rapid: and this, I believe, has principally arisen from the circumstance that chemistry has been made an adjunct to physiological inquiry. Probably most of you have heard something of what has been done in this department of science, for it is a popular subject. None, however, but those who have really studied it, can comprehend the extent of the benefits derived from the union of physiology and organic chemistry. Vitality itself seems made up of a series of ceaseless chemical changes; for the elements of the food taken into the stomach form new compounds, and are ultimately converted into the tissues of the animal frame; these, having performed their office, are again disorganized, and pass away as excrementitious matter. Chemistry, applied to physiology, has explained to us the nature of these changes; it has shown the relation which the different elements of food bear to the functions of the animal; that some are nutritious, convertible into tissues, and making up for the waste which is constantly occurring; while others only tend to support life by ministering to the process of respiration. Without having studied physiology, the medical practitioner cannot hope to be able to estimate the disturbances of function so generally indicative of disease, and he therefore loses one of the most valuable accessaries to diagnosis. We have heard, in the description of a healty man which I have just quoted from Dr. Gregory, that the due performance of the functions of the body constitutes the chief evidence of a healthy condition. How is the student to trace the deviation from this condition, unless, through the medium of physiology, he has made himself conversant with the attributes of healthy action? Having, gentlemen, completed your studies up to this point, you are prepared to enter upon the study of the third member of the triad, upon which I believe the practice of both surgery and medicine principally rests. I mean, gentlemen, to speak of pathology; anatomy being considered the science of healthy organisation; physiology of healthy function; while pathology is the science of disease. On entering upon the study of pathology, I must warn you, gentlemen, from the error of classing together pathology and morbid anatomy, as the two, although intimately related, and tending to one object, are quite distinct. Morbid anatomy may, I think, be regarded as bearing the same relation to pathology as the anatomy of normal structure bears to physiology. Morbid anatomy discovers the changes which are produced by disease in organised tissues. Pathology may be said to be the science of disordered functions or of symptoms. The study of morbid anatomy is essential to the proper comprehension of the laws of pathology, and, in many cases, an acquaintance with the effects produced in the system by alteration of structure, is sufficient in itself to enable the surgeon at once to form a diagnosis. In such diseases as phthisis, morbus Brightii, aneurism, or enlarged prostate gland, the changes of structure are sufficient to account for the constitutional disorder attendant upon them. Here, therefore, morbid anatomy furnishes the student with the most important data to his diagnosis, inasmuch as the urgeney of the symptoms is generally in proportion to the extent of abnormal organic change. There are, on the other hand, diseases of importance, nay, even of the most dreadful character, in which morbid anatomy has hitherto singularly failed in discovering any structural change to which the disorder can be attributed. Hydrophobia and tetanus, perhaps the most fearful of all the maladies incidental to man, and at the same time the most violent in their symptoms, leave no trace of organic lesion from which their true seat and character can be deduced. The same may be said of fever and rheumatism, in both of which morbid anatomy fails to point out the "*error loci.*" It is under these circumstances that the science of pathology comes in to our assistance, and teaches us to seek in symptoms and disordered functions that experience which we fail to derive from morbid anatomy. Let me, therefore, urge upon you, gentlemen, the necessity of a close attention to that part of your education which you will have to acquire

in the wards of the hospital, to study closely the symptoms of disease and the peculiar appearances of local lesions, for it is thus, and thus only, that you can learn pathology, and store up in your minds that species and solidity of knowledge which will guide you in your future practice, and without which, devoid of any fixed professional principles, you will find yourselves constantly surrounded by doubt and perplexity. In the short time at my disposal on the present occasion, I cannot, gentlemen, enter as I could wish into many topics connected with the subject now before us; but, with relation to the study of morbid anatomy. and pathology, I cannot refrain from alluding briefly to the advantages afforded by the employment of the microscope and chemical investigation. In examining minute structures, whether in health or in disease, the microscope furnishes us, as it were, with a new sense; it is, in fact, impossible to arrive at anything like a correct idea of the character of the various tissues and fluids of the body, without the aid of this instrument; but with it, the observer will be struck with wonder at the extent of the field of useful inquiry which will open to his view. The study of normal structure will of course prepare the way to that of the effects produced in the different tissues by disease; and, in learning morbid anatomy, the student who does not acquire some knowledge of the use of the microscope, must be content to remain ignorant of a multitude of important facts, or at least know of them only by hearsay,—a poor substitute for knowledge gained by personal investigation. In relation to pathology, chemistry s also a powerful adjunct, and in many cases an essential one; in urinary disorders, in the examination of abnormal effusion, and indeed in a host of other cases, chemistry often becomes the chief means of forming a diagnosis; and I recommend you, gentlemen, to acquire a sufficient knowledge of this branch of science to enable you to make examinations for yourselves. I do not, however, think that you ought to devote a large portion of your time to such subjects,—you have other duties at present more onerous; but many a leisure moment may be well engaged in exercising yourselves in these, what I call, recreative studies. To return, however, gentlemen, to the more direct current of my address. I have now described to you what ought, in my opinion, to be your course of study with respect to the commencement of your professional education. I have said that the foundation of your knowledge of surgery and medicine must be the three branches of science I have already dwelt upon, viz., anatomy, physiology, and pathology; but even in these we have only the instruments by which further objects are to be attained. Stopping here, the student will have done little towards learning how to use the knowledge he has already acquired, in the future practice of his profession; that is, in rendering it applicable to the treatment of disease; and, as I have already told you, (if you have but derived that extent of knowledge of the subjects I have mentioned, sufficient to commence the study of the treatment of morbid affections,) you may now, with equal advantage to yourselves, pursue your ultimate intention, the cure of disease, either in the physicians' or surgeons' wards of the hospital.

General medical practice, to which most of you will probably devote yourselves, requires a knowledge of both sciences of medicine and surgery; and the object of all the training I have now spoken of has been to prepare you for entering upon the study of these in the most legitimate manner. A surgeon myself, you would expect that surgery would be the first subject upon which I should particularly dwell; it is not my intention, however, to give a lecture either on surgery or medicine; but I feel called upon to take into consideration the great end of all that you have hitherto learned, viz., the comprehensive science which is to be the subject of your pursuit throughout your future career. I have already said that in practice nothing is more artificial, I may say unnatural, than the arbitrary distinction between medicine and surgery; but, for the sake of convenience and perspicuity, I must now speak of them separately. Surgery, strictly speaking, means the art of manual operation; but you must not suppose, gentlemen, that it consists in nothing beyond this. Cutting and mutilation are perhaps among the least important duties of the surgeon; mere natural dexterity of hand would enable any one to become a skilful operator; but it is the exercise of sound judgment in the discrimination of the peculiar points in a case, and in the adoption of appropriate means most likely to obviate the necessity for operation, which constitutes the good surgeon. Some surgeons, indeed, from an unwise covetousness for fame, seek every opportunity of performing operations, making the suffering and danger to which the patient *must* be exposed a secondary consideration. Let me guard you against such selfish feeling whenever it may happen to you to be placed in a situation in which it becomes your duty to exercise your surgical skill for the benefit of a patient. Do not be led away by the sole desire of self-aggrandisement, but bear in mind that the life of a fellow-being is in your hands, and depends, in a great measure, upon your skilful performance of the task which you have undertaken. Let, therefore, all your considerations be devoted to your patient, and not only in reference to the immediate operation, but equally so to his preparation, and in his treatment after the operation has been performed.

Of course, gentlemen, I cannot now enter upon any of the details of surgical practice; that must be left for a future opportunity; here, my remarks can be only of a general character. Be cautious in determining to submit your patient to the ordeal of an operation; for let me again impress upon your minds, that he who saves a limb by his careful attention and scientific treatment is a much more praiseworthy surgeon than he who cuts it off, no matter how dexterously the operation may have been performed. At the same time, manual dexterity in surgical operations must not be neglected; there are some diseases, such as stone in the bladder, hernia, &c., which are beyond the reach of medicine—operation alone can relieve the patient, and his safety can only be insured by competent skill on the part of the surgeon. But it does not invariably follow, that, because a disease is beyond the reach of medicine, surgical operation should be had recourse to; for the disease may be of such a nature that its extirpation can only remove the local manifestation, but not eradicate the germs of its malignity from the system; sometimes, however, even under these circumstances, the removal of the affected part may be advisable, for the purpose of diminishing local suffering, and even of prolonging the life of the patient, although without any hope of eradicating the disease or preventing its return. When a limb is the subject of lesion, a question may arise whether it should be amputated. You should remember, gentlemen, that, if your patient survives the operation, he must remain for the rest of his life a mutilated cripple; and therefore it is well worthy of your earnest consideration to do everything in which therapeutics can avail towards saving the limb, and not hastily propose its removal; for it is the judgment and acumen evinced on such occasions which distinguish the scientific surgeon from the mere operator. Therefore, if it be right for you to pause before you bring surgical instruments into requisition, it must be most necessary for you to render yourselves efficient, to substitute medicinal for surgical appliances; in fact, you must become physicians: this alone might be considered a sufficient reason for your due attention to the study of the science of medicine. But bear in mind, moreover, that, in general practice, how much more frequently you will be called upon to act in the character of a physician, as ninety-nine cases out of a hundred are such as are supposed to belong to this branch of science.

Now, gentlemen, I believe there is but one way to become a good physician. Your preparatory studies, we have seen, relate, in equal degree, both to physic and surgery; but to become a good practical physician, nothing but personal experience and accurate observation can avail. Symptoms can only be learned at the bed-side; and I believe it perfectly impossible for any one to gain a power of forming a just diagnosis, with any degree of certainty, who has not had the benefit of a practical teaching; and this power to diagnose, to recognise the nature and seat of disease from the symptoms, constitutes the highest attribute of a physician; and, without any invidious distinction, I cannot deny myself the gratification of mentioning to you an important illustration of this fact, to prove how science may reveal the hidden secrets of disease:—

A patient was admitted into Guy's Hospital last June, suffering under a peculiar stridulus and hoarseness of voice, attended with a constant desire to cough. These symptoms were supposed to arise from disease of the larynx. Dr. Addison's opinion was sought, and, upon minute examination, he was struck by some peculiarity in the character of the cough and breathing, which led him to give an opinion, that the laryngeal affection was a secondary effect, and the symptoms arose from some source of irritation to the recurrent

nerve within the chest, and said it was probably aneurism of the aorta; but, beyond an indistinct diastolic bruit, no trace of aneurism was so be discovered—no tumour, no pulsation, or indication of pressure of any neighbouring organ. The patient died, and, on inspection, an aneurism involving the left recurrent laryngeal nerve was found, which was wasted from the pressure it had been subjected to, and the muscles of the larynx supplied by that nerve were in a state of atrophy.

The properties of medicine form also another important part of your studies. Their chemical characters you may learn, in a great measure, from the labour of others; but their action upon the animal economy in different constitutions, the modifying influence of diathesis and of diseased action, can only be learned by scrutinous observation of the sick. Gentlemen, let me beg of *you*, therefore, who are sufficiently advanced, to consider your strict attendance upon the wards of the hospital as the most important part of all in your education. Your other studies, it is true, tend to the same object—to make you skilful practitioners; but you may become perfect anatomists, excellent physiologists, possess even a competent knowledge of the laws of pathology—you may be skilful chemists, conversant with the science of botany, and the properties of the whole contents of the materia medica, and yet be unfitted to minister to the wants of the sick. To be good physicians, you must render yourselves familiar with disease, watching it from its first deviation from health, through its whole course, to its termination; and with equal care, too, whether it ends in recovery or in death; for in either case many important facts may arise from a reconsideration of the case. From the recovery, the efficacy of certain remedies may be established as well as of the practice which had been adopted; and when death has robbed you of the hope you may long have cherished, still science may be converted to a most useful purpose for the benefit of mankind by the examination of the body, and the probable discovery of the nature of the disease, and the source of failure in the treatment. Patient and long-continued observation by the bedside, must be, therefore, the great object of your hospital career; and I trust, gentlemen, you will lose none of the excellent opportunities you here possess of acquiring a knowledge so essential to your future success in life.

And now, having treated briefly of those parts of my subject which appeared to me to bear most forcibly upon your education, I wish, in conclusion, to address you seriously upon what seems to me to relate quite as closely to your success and happiness in after life during the course of your professional practice, as the routine of education does during your pupillage at the hospital. We have seen something, gentlemen, of the nature of the studies necessary to the acquirement of professional knowledge; we have seen something of the means and appliances by which you are expected to become competent professors of the medical science; but, gentlemen, there is something more; a man must not only study the science or art whereby he expects to live, but he must study likewise to become a worthy and useful member of society. He must learn wisdom of conduct; he must learn that no man should live for himself alone, but that all owe duties and obligations to the social world which can never be dispensed with, nor ever despised and set at nought by any individual, excepting at his own loss. In your relationship to your professional brethren always maintain a gentlemanly and liberal mode of conduct and consideration; neither on the one hand be too ready to sacrifice your own opinions to those of others, nor, on the other, to adhere obstinately to any prejudice or dogmata of your own; never detract from the character of any man; in this respect keep a guard upon your tongue at all times, for, even if he deserve condemnation, it is more Christianlike to conceal than to divulge his faults; and be well assured no man yet ever elevated his own position by the degradation of a fellow-creature. In your intercourse with your patients cultivate that suavity and gentleness of manners which tends so much to alleviate the pains and sorrows of sickness, and which so endears the medical man to his patients, but at the same time act with decision, promptitude, and firmness. The calm presence of mind which directs the hand of the surgeon will be found also the most favourable to the exercise of the judgment; and, as I have no doubt but that you are determined to become good surgeons, so am I confident that you will always entertain a proper regard for the practice of those sentiments which should characterize and adorn your position in the world as gentlemen. If, in the busy occupations of this transitory world, so much devotion is necessary to the attainment of its objects, consider how much more must be necessary to fit yourselves for the better world to come; and, depend upon it, the duties are perfectly compatible,—everything which tends to prepare you for the next state of existence, renders you better fitted for the present. The principles of religion are the best adapted to advance you in every earthly effort, for they teach you to direct your energies towards the general benefit of mankind, and not to pursue selfish gratifications. Consider yourselves as only constituting mere living molecules of the created world, but still destined to perform your given part in the great mechanism of the whole; but with this grand distinction from the rest of animated beings, that you are reasonable, competent to judge between right and wrong, and answerable to the Creator of all things for the choice you make.

ST. GEORGE'S HOSPITAL.

By HENRY CHARLES JOHNSON, Esq., F.R.C.S.,
LECTURER ON MEDICAL JURISPRUDENCE, AND ASSISTANT-SURGEON TO THE HOSPITAL.

Sir BENJAMIN C. BRODIE, Bart., President.

Sir,—I could have wished that one of the officers of this establishment more competent than myself, had been selected for the purpose of opening the proceedings of this day. Most sensible am I, that my powers are inadequate to do justice to the subjects I have to submit to your consideration.

Since the existence of a school connected with this hospital, it has been the custom of the lecturers, at the commencement of each winter session, to address to those gentlemen who honour them by their presence, some introductory remarks, either on the general conduct of the school, or on matters connected with the plan of education to be pursued by those about to enter on their professional career. On the utility or expediency of such annual addresses, many opinions prevail, but custom hitherto has held its sway, and no school in the metropolis considers that it has fulfilled its duties or the expectations of its supporters, without its annual introductory lecture.

My colleagues, however, have deemed it advisable to discontinue this practice, and to open the present session by distributing to the meritorious students of this school, those rewards and distinctions which they have gained by their industry and talents. They have considered that it would be more gratifying to this meeting, and more especially to those who have received their education at this hospital, to witness the success attendant on the efforts of some of the junior members of our profession, rather than listen to the dry and uninteresting detail of an ordinary introductory lecture. They felt, moreover, that a wholesome stimulus would be given to the exertions of those about to commence their studies, to gain by their efforts similar rewards and distinctions to those which will be conferred this day on the most deserving students of preceding years.

Before I present to you the successful candidates for the various prizes in this school, I may, perhaps, be allowed to make a few remarks on the institution which these gentlemen have adopted as their *alma mater;* and point out to them the distinguished position they may attain, if they do but follow in the track of many of their predecessors, who, with much fewer opportunities than those which they possess, have attained a fame and eminence in their profession to which I would have them aspire.

It is little more than a century ago that St. George's Hospital reared its head from being a small infirmary, in Petty France, in Westminster, and subsequently in Chapel-street, to the rank and standing of a metropolitan hospital. In 1733, "the subscribers, finding that their patients increased, and that a corresponding improvement took place in their funds, exerted themselves to find a house in a more airy and convenient situation; and at length procured a lease of Lanesborough-house, at Hyde-park-corner, at an annual rent of 60*l*., as being, on account of the largeness and strength of the building, and airyness of the situation, most convenient for the purposes of the charity. The improvement in the funds soon afterwards enabled the governors of the institution to extend their benevolent views; and, for that purpose, to purchase of the Dean and Chapter of West-

minster the freehold ground whereon the hospital now stands, in order to settle the charity on a permanent foundation. For a century, Lanesborough-house remained much in its original form. It was then razed to the ground, and the present splendid edifice in which we are now assembled was, by the munificence of the governors and the liberality of the charitable public, erected in its place. Upon the incalculable benefits thus bestowed on the sick poor I need not descant: they are echoed through the homes of the afflicted and the destitute.

From the foundation of this hospital, not only have the sick and lame received aid, comfort, and skill in the alleviation and cure of their diseases; but the practice, the science, and the literature of our profession, have been enriched by the labours of those who have gleaned their information within its walls.

In the early part, and towards the middle of the last century, William Hunter flourished, and enriched our knowledge on many important subjects connected with anatomy, surgery, and midwifery. From him we learned the uses of the absorbent system. To him are we indebted for some interesting pathological facts, connected with the joints, the discovery of the tubuli testis, of the ducts of the lachrymal gland, and other useful researches in anatomy and medicine too numerous to mention on the present occasion. His life and persevering zeal may be considered as a model for future men to emulate and to admire. He, Sir, was a pupil of this hospital, and may he said to have founded the school.

After his time, a long succession of illustrious names adorns the annals of St. George's.

John Hunter soon followed his brother William, and in this institution did he collect those facts and materials, from which, by his acumen and powers of classification and arrangement, he deduced those great principles which I may justly say have proved the beacon and the guide in the treatment of disease to the admiring and enlightened countries of the world. Nor do we cease with the fame of the Hunters. It was here that Cheselden operated for the stone, which was considered in his time, and justly so, as an operation of danger and difficulty. A curious resolution stands on the books of our hospital about this period, which says, "That the cutting for the stone be left to such surgeons as think proper to perform the same."—(April, 1745.)

The mode of operating, and the instruments wherewith it was performed, although determined by Cheselden, were improved by Sir Cæsar Hawkins; and the gorget which he here employed still remains in use amongst many of our best surgeons of the present day.

Towards the conclusion of the last century and the commencement of this, we find the followers of John Hunter securing and extending their reputation by his precepts and his example. Sir Everard Home may be said to be the pupil of John Hunter, and from him gleaned many of the materials for producing his magnificent work on comparative anatomy, which must ever remain a monument of his industry and fame. Nor, Sir, is it fitting in me to hold up alone for imitation the great surgeons who have adorned this institution. By one of the physicians of this hospital was that stimulus and zest given to the study and cultivation of morbid anatomy which has raised to the level of the higher sciences the practice of our profession. Till the time of Baillie, morbid anatomy, the most important of all investigations in the knowledge and treatment of disease, was to a certain extent neglected in the schools. From this time, however, pathological inquiry has been carried on with an energy and success which has spread from hence to all the great capitals of Europe where facilities are afforded for its culture and pursuit. To morbid anatomy may we look for the abolition of empiricism and to more perfect and surer methods of relieving human suffering.

Drs. Pemberton and Heberden afford us examples in the strict and lucid manner in which they portrayed disease, in their forcible and elegant dissertations on some of the most important points in the practice of medicine; and Dr. Hope, more recently amongst us, may be said to have contributed largely to our information respecting the diseases to which the heart and circulation are prone.

Nor, Sir, has general science failed to gather its triumphs from those who have gone before in their useful career at the bed-sides of the patients of this charity. The names of Young and Wollaston enrich the catalogue of our predecessors. The former brought to bear all those great truths with which natural philosophy furnished him, upon his efforts to alleviate the miseries of those submitted to his care. True philosophy, and the profoundest learning, marked the character of the late Dr. Young. The latter, Dr. Wollaston, was pre-eminent for his chemical knowledge and research; and, though he failed in obtaining his wish to become an officer of this establishment, yet we enjoy the merit of ranking him amongst the most renowned and popular of those who have studied in this school.

If, Sir, we consider the advantages which are enjoyed by the sick poor, and by the profession to which we belong, from the existence of public hospitals, we shall find that they weigh but light in the scale against the real and substantial good which accrues to the country at large, and to its numerous dependencies abroad, through the medium of the schools of medicine which are everywhere connected with them. This hospital, in its earlier days, laboured under the disadvantage of possessing no real property on which to found its basis. Its very existence depended on its good name, and on the charitable wishes and benevolent views of its original founders and supporters. A delicacy (and, though a mistaken, a very natural one) prevailed, lest the feelings of those who were unfortunately the subjects of disease, might be intruded upon and offended by extending a knowledge of their sufferings beyond the observation of their actual medical attendants. But happily, Sir, for society at large, these highly-to-be-commended but mistaken notions no longer prevail, and in our present more extended views and ideas on the dissemination of knowledge, a school of medicine is considered as much an integral part of a public hospital as any other adjunct which may be employed for the benefit of the sick poor who come within its walls.

Sir, so fully has this become a general rule and principle, that in some establishments devoted to learning and education, a school of medicine has been formed long before those institutions possessed efficient hospitals of their own to illustrate the precepts which they taught, the school being considered as the surest foundation on which to raise the superstructure of their future asylums for the sick and needy. The necessity of teaching, and, consequently, of a school of medicine connected with St. George's Hospital, was determined by a resolution of the governors as far back as the year 1793. Amongst other regulations, the following apears:—"That an operation be performed on a dead body attended by explanations; or a lecture given on some of the principal parts of surgery once a week, by one of the surgeons of the hospital in rotation, for nine months in the year." Here, Sir, do the governors enforce on us the necessity of teaching. From that time to the present a school of medicine has gradually developed itself, and, as it now exists, may vie with the oldest and most wealthy of this great metropolis, affording as it does every facility for the successful study of disease. The school, moreover, has received the fostering care of the governors at large, who, by their liberality, have lately supplied us with suitable accommodation for teaching anatomy and chemistry, in premises set apart from the hospital itself. These, together with the other appurtenances of lecture-rooms and museums within this building, has placed the necessities of the school in a most efficient form. While the governors have thus offered inducements to the students of this hospital for the successful cultivation of medical science and pursuits, the teachers have not been wanting in holding out rewards to industry, talent, and good conduct. Scholarships and prizes have been instituted as premiums to knowledge and exertion. Nor, Sir, have others, at one time connected with this hospital, and who feel that an impetus should be given to medical education and to aspiring talent, been wanting in their generous efforts to promote the welfare of the school. Your own name, Sir, and that of Dr. Chambers, stand on the list to-day, as bestowing prizes on the subjects of Clinical Medicine and Clinical Surgery.

In selecting, as I have done, a few of the most remarkable individuals, to whose lives and labours I would direct the attention of the junior part of my auditory, I would have them bear in mind, that we have yet amongst us those whom they would do well to imitate as examples of professional zeal and professional success,—those who have contributed by their works to establish principles in the treatment of disease which will long outlive their worldly career, and secure a lasting reputation for themselves, and for the school in which they have taught and laboured.

In the present remarks I have offered no novelties to attract your attention. I considered that a brief sketch of the

origin and progress of this splendid charity, which may well be ranked amongst the best and proudest of this great city, might not be altogether uninteresting to some of my auditory; and that to the junior part I might point out the paths which are now open for their talents and industry, that they may be led to zeal and emulation by the example of those ornaments of our profession who have toiled in the same field which they are about to occupy, and to stimulate them to advance, by their instrumentality, the good intentions of the supporters of this hospital, in promoting the advancement of science and the amelioration of the sufferings of their fellow-creatures. In conclusion, I must congratulate these gentlemen on receiving, at your hands, Sir, the distinctions which will be conferred on them this day. It must ever be a gratification to them in after-life, to feel that the honourable position which they hold in this school was known to one who, by his industry, talent, and upright bearing, both in his private and his professional life, has gained for himself the goodwishes of the multitude, and conferred on this hospital and on British surgery a distinguished and undying fame.

SENIOR SCHOLARSHIPS . .	Mr. T. K. Hornidge.
JUNIOR SCHOLARSHIPS . .	Mr. R. T. Bolton.
SIR BENJAMIN BRODIE'S CLINICAL PRIZE	Mr. T. K. Hornidge.
DR. CHAMBERS'S CLINICAL PRIZE	Mr. T. K. Hornidge.

ANATOMY.

Senior Class.

Prize	Mr. W. B. Stephens.
Certificate	Mr. H. V. Carter.

Junior Class.

Prize	Mr. R. T. Bolton.
Additional Prize	Mr. H. Pollock.
Certificate	Mr. Royston.

PHYSIOLOGY.

Prize	Mr. W. B. Stephens.
Certificate	Mr. J. Ewens.

BOTANY.

Prize (Session 1849)	Mr. H. V. Carter.
Prize (Session 1850)	Mr. W. Williams.

CHEMISTRY.

Prize	Mr. H. Pollock.
Certificate	Mr. Royston.

MATERIA MEDICA.

Prize	Mr. R. T. Bolton.
Certificate	Mr. Royston.

MEDICAL JURISPRUDENCE.

Prize (Session 1849)	Mr. T. K. Hornidge.
Certificate	Mr. W. Lichfield.
Prize (Session 1850)	Mr. W. B. Stephens.
Certificate	Mr. H. V. Carter.

MIDWIFERY.

Prize . . . . . (*æquales*)	Mr. J. Earle. Mr. G. Earle.
Certificate	Mr. Royston. Mr. C. R. Huxley.

PRACTICE OF PHYSIC.

Prize	Mr. T. K. Hornidge.
Certificate	Mr. G. Earle.

SURGERY.

Prize	Mr. T. K. Hornidge.
Certificate	Mr. F. Day.

After the prizes had been delivered,

SIR BENJAMIN C. BRODIE, Bart., F.R.S.,
SERGEANT-SURGEON TO THE QUEEN, ETC. ETC. ETC.,

thus addressed the meeting:—

Although several years have now elapsed since I resigned the office of surgeon to the hospital within whose walls we are now assembled, I trust I need not assure you of the great interest which I still feel in the prosperity of the hospital itself, and in the reputation of the medical school which is connected with it. It would, indeed, be strange if it were otherwise. It was here that I began the study of that profession, the practice of which has been the main object of my life. For whatever knowledge I have been able to acquire, for whatever advantages have accrued to me professionally, for these I am more or less indebted to my connexion with this institution; which is, moreover, associated in my mind with many agreeable recollections of friendships with my colleagues and pupils,—of the interesting pursuits, the hopes, and fears, and aspirations of my early life.

It was my good fortune to be elected assistant-surgeon to the hospital at a very early period, and, partly as assistant-surgeon and partly as surgeon, I was attached to it during the space of thirty-two years. In that period great changes were accomplished. The old inconvenient building (which nevertheless had afforded the means of obtaining a great reputation to Sir Cæsar Hawkins and Dr. Heberden, Dr. Baillie and Sir Everard Home, and a still greater one to Hunter) was exchanged for this handsome and commodious edifice, possessing all the advantages over the former one which greater experience and the improved state of science could afford. Let honour be given where honour is due! In adverting to this subject, it is but just that I should add, that it is chiefly to one individual that we are indebted for this great improvement in our condition. It was Mr. Fuller who first proposed that the hospital should be rebuilt. Many thought it a hopeless undertaking; and it may well be doubted whether at that time it would have been successful, if it had not been for his determination and perseverance, and for the spirit which he infused into those who, in the first instance, were less sanguine than himself.

It is, indeed, to me a source of great satisfaction, to find the St. George's Hospital of the present day so much better adapted than that of former times for all the purposes for which an hospital is required, whether as furnishing the means of relief to the humbler classes of society when suffering from accidental injury or disease, or as a place of instruction for those who are being educated for the medical profession. There are, however, other recollections of a less pleasing character, which force themselves upon me when I recur to the period of my early connexion with this institution. Of those under whom I myself studied, of those who were my fellow-students, of those who were my colleagues, and even of those who were junior to myself, how many have disappeared! how many have passed into that region from which no traveller returns! One individual, however, who was Assistant-Surgeon when I was yet a pupil, and who was my colleague afterwards, still remains among us. During the term of thirty-two years, Mr. Keate and myself laboured cordially together, and I may, I believe, affirm that not only no unkind word, but that scarcely even an unkind thought ever passed between us. It is not for me to determine how far we were successful, but I may say that we were alike anxious, and neither one of us more than the other, to render the hospital more efficient, both as a receptacle for the sick, and as a medical school. You must excuse me, if I take this opportunity of expressing how much I am myself indebted to the example which Mr. Keate has afforded me as an accomplished surgeon, and a man of integrity, and a gentleman. Nor are these observations irrelevant on the present occasion, as I am thus enabled to point out to the younger members of our profession by what rules they should shape their course, if they would enjoy the esteem and respect of others as they advance in life.

It is not, however, to those who are already members of our profession, but to those who are now engaged in study, and who aspire to belong to it hereafter, that I now more especially address myself. Many of you are in the very outset of your career; you are probably for the first time in the metropolis, for the purpose of attending lectures, dissecting, and of observing diseases, and the treatment of disease, in the hospital. You are entering on an unknown region, in which you have no experience of your own to guide you; and it is reasonable to suppose that you may derive some assistance from the experience of an older person, who was formerly in the same situation as yourselves.

And, first, let me impress on your minds, that the next few years are the most important and critical period of your lives. You are now to lay the foundation of that knowledge on which your future character—nay, your very subsistence—is to depend. Let these years be wasted, and you will never be able to redeem the loss. Ceaseless but unavailing regrets will haunt you during the remainder of your days. But let the opportunities which are now offered to you be properly cultivated, and twenty years hence you will reap the advantages resulting from the labour which you may now undergo, and the effort which you may now make to

keep within reasonable limits the not unnatural desire of youth for leisure and amusement.

It is well, before you enter on these new pursuits, that you should satisfy yourselves as to what will be really required of you, in order that those who feel that they have it not in them to make the necessary sacrifice, may turn aside to some less arduous, though probably less honourable, occupation.

You must be regular and constant in your studies; you must miss nothing; for what you learn one day, is not only important in itself, but is like the link of a chain, and is necessary for the right understanding of what you are to learn on the following day—

"Pater ipse colendi
Haud facilem esse viam voluit."

At no time could any one qualify himself for our profession without devoting himself wholly to the task. But if that were true a century ago, how can it be otherwise at the present time, when the competition is so much increased, and when there is so much greater a mass of knowledge to be obtained than formerly. I leave it to your respective teachers to tell you what lectures to attend, what time to devote to the dissecting-room and hospital. The advice which I shall now offer to you as to the conduct of your studies, is of a more general nature. Take notes of your lectures, however brief; not in the first instance for the purpose of transcribing them, (for that is better done at a more advanced period of your education,) but for the purpose of keeping up your attention to the lecture at the time, and of giving you the habit of fixing your attention afterwards. The incapability of fixing the attention is one of the chief difficulties under which medical students generally labour, especially those who do not come directly from school or college. Much here depends on the individual mind, much on early habit. Where the difficulty exists, some will overcome it more easily than others; but, whatever may be the amount of effort necessary for this purpose, the effort must be made; and I venture to say, that, unless there be some actual deficiency of intellect, it will not be made in vain.

For many years past I have offered a prize to the students of St. George's Hospital for the best series of clinical notes of cases, with commentaries on them. I was led to do so, because I was satisfied that it is only by taking notes of cases at the patient's bed-side, that a student can derive any real advantage from his studies at the hospital. You may go daily round the wards, staring at what is going on, and every now and then listening to an observation made by the physician or surgeon; but you will never obtain any precise knowledge, either of the progress of disease or of the effects of remedies, unless you investigate cases for yourselves, with your note-book and pencil in your hand. The notes thus taken, should be transcribed in the evening, and preserved for future use. You will find them the best things to refer to (as far as they go, much better than books) in after life, and, in transcribing them, many things will occur to you which would not have occurred to you otherwise. And this leads me to another subject. In what are called the golden verses of Pythagoras, we are told that before we sleep at night we should review the whole of our proceedings during the day with reference to our moral conduct; and very good advice it is, worthy of a Christian, though it comes from a heathen philosopher. But I would carry the rule further. Always in the evening review your studies of the previous day, and endeavour to recal to mind the principal facts which have been presented to your observation. This will not only impress them on your memory, but it will give you the habit of thought and reflection. For, observe, that it is not sufficient for you to store your minds with knowledge. A member of the medical profession, above most others, must learn to arrange his knowledge; to view facts in their relation to each other; in a word, he must learn to think. If knowledge be necessary for him it is not less necessary that his mind should be so trained that he may know how to use it. However well informed he may be, he will otherwise prove to be a very indifferent practitioner.

There is one other subject in which it may be well that I should offer some advice to the junior part of my audience. You are placed very much at your own disposal in this vast city, where there is much to interest you, much to attract your attention, besides those higher objects for which you are assembled here. You will have many inducements to be idle as to your studies; but let me urge you not to yield to the first temptation. If idle habits are once contracted, it is difficult to alter them; and it is not less difficult to be rid of idle companions. I need not repeat to you, that idleness is incompatible with the acquirement of knowledge. But there is much worse behind. Idleness leads to dissipation, and dissipation to extravagance, and then come debt, disgrace, loss of self-respect, moral degradation. Be careful in choosing your companions. Exercise a proper self-control in the first instance. Make it your business to pass through the period of your professional education, not only with the character of diligent students, but of gentlemen in the *best* sense of the word, and you will be sure of being amply repaid by the enjoyment hereafter of professional success, and the respect of the world at large.

Gentlemen, I offer you this advice, not because you are medical students, but because you are young men. I do not believe that you are more in want of such admonition, than others of the same age. I know not what medical students may be in other schools, but, as to those belonging to this school, with which I was formerly so long and so intimately connected, I feel it but just that I should express my sincere conviction, that there was always as large a proportion of young men diligent in the pursuit of knowledge, and decorous in their general conduct, as is to be met with in any class of society. Of course there were, and always will be, exceptions to the general rule. And you, and I, and all of us, who would maintain the high character of our profession, must be anxious that these exceptions should be as few as possible.

To you, gentlemen, who have been the successful competitors for the prizes given annually by the different teachers of this school, I offer my sincere congratulations. If you have gained honour for yourselves, you have also done good to others, for example is better than precept; and there is no one among you who has not exercised a wholesome influence on his fellow-students. Let me advise you to pursue the same course through life, recollecting that, even as practitioners, you must still be students. Knowledge is endless; and the most experienced person will find that he has still much to learn, many opinions to modify, and errors to correct. You are entering on a profession, which is good or bad according to the manner in which it is pursued. Let me offer you some suggestions as to your conduct in it. On no occasion allow anything to interfere with the strict performance of your professional duties. Whatever you undertake to do that do to the very best of your ability, sparing neither thought nor trouble, whether it be in the case of the poor man, to whom you give gratuitous assistance, or of the rich man, who remunerates you liberally for your attentions. Consider yourselves as being engaged, not in a trade, but in the cultivation of a noble and interesting science. Let it be your first object to deserve and obtain the good opinion of all classes of society with whom you come in contact, not only as being skilful practitioners, but as men of honour and integrity. You will thus be in that independent situation, which will place you above the caprice of the foolish, and also above the necessity of stooping to obtain the favour of any individual. Do justice to others, but do justice also to your profession and yourselves, always bearing in mind, that those who are in any way usefully and worthily employed have a much higher place in the scale of existence than those useless and selfish persons who live only for themselves, however high their rank, however large their fortune.

SCHOOL OF MEDICINE AND ANATOMY,
ADJOINING ST. GEORGE'S HOSPITAL.

By EDWIN LANKESTER, M.D., F.R.S., F.L.S., &c.

Gentlemen,—In accordance with a custom that prevails in our medical schools, I have been requested by my colleagues to deliver the Introductory Lecture for the session 1850-51. I will not stop to inquire whether this is a custom that would be more honoured in the breach than the observance, but at once address myself to the task before me. In doing this, I wish it to be understood that I shall rather address the junior part of my audience,—those who are supposed to be commencing the study of medicine, than the senior members of our profession, who have honoured me

with their presence. My object will be rather to give the student a bird's-eye glimpse of the country over which he has to travel, and a few directions and warnings to help him on his way, than to afford to the qualified practitioner any information in which he could find interest or instruction.

The profession of medicine involves in its practice the same principles that we find involved in all other human occupations. Man, in all his relations to external nature, has to do with the properties of matter, whether he be employed in the humble task of tilling the soil, or the more elevated one of studying the structure and functions of the human body. To know the laws which govern the existence of any of the forms of matter, on whose use his health, comfort, ease, or happiness depends, must necessarily be found of advantage to man. There is no department of human activity so humble that a knowledge of the materials employed does not contribute to its more successful cultivation. I might illustrate this by a thousand instances. I could show you that, by the application of a knowledge of chemistry, the humble occupation of the maker of matches to procure artificial light had been converted into an important branch of national manufactures. I might allude to the lowly occupation of knitting as having been developed, by a knowledge of physical laws, into the great textile manufactures of Britain, which now supply almost the whole world with clothing. But this will suffice for illustration. If, then, man has obtained such great results by the application of physical laws to the lower departments of human industry, how much greater results may we anticipate from the same research, and the same application of laws, in pursuits which deal with the complicated phenomena of life. The exercise of the medical profession differs not so much in kind as in degree from the other occupations of human life, and the degree in which it differs is measured by the complication of the phenomena presented by the human frame, as compared with any other set of physical or vital phenomena. It is in this complication that we discover the cause of the comparatively low condition of physiology as a science. It is not that those engaged in the investigation of these phenomena have had less talent, or have pursued improper methods, but that the elementary facts, presented in each compound fact, have been infinitely more numerous, and immeasurably more difficult to unfold, than any presented in mere physical investigations. Grand and imposing as are the movements presented by the heavenly bodies, their adaptations and arrangements are simplicity itself compared with those we meet with in the human eye, or in the more simple provisions of the animal heart. A want of the full conviction of the real difficulties which beset the study of physiology often leads to the adoption of the most crude and hasty generalisations; whilst a scepticism with regard to the powers of the human mind to reduce its phenomena to law, has quite as often led to a blind and irrational empiricism. Thus we find, that the practice of medicine, for its successful employment, like all other human occupations, demands, on the part of those who practise it, a knowledge of the properties of the materials on which it is engaged.

The specialty, however, of the practice of medicine consists in the fact, that the human frame is liable to departure from the ordinary laws (the physiological law) of its structure and function which we call health, and a new set of phenomena occurs which we call disease, and which is attended with changes of structure, obeying another set of laws (the pathological law). The special function of the medical man, the duty which has given him a place in every civilised society, is to convert the pathological state or condition of the human frame into a physiological one, and where this cannot be done, to seek to produce conditions in which life may be prolonged. His occupation, then, being the arrest of disease, and the restoration of health, it is essential to the successful attainment of these objects, that he knows both in what health and in what disease consist. That the medical man will ever know, in all their fulness, in what health and disease consist, may perhaps be doubted, but the man who embraces the medical profession is bound by the most sacred obligations to neglect no source of information, whether from testimony or experience, to assist his judgments on health or disease, or guide him in the use of means to maintain the one and arrest the other. The laws, then, of physiology and pathology are the proper study of the medical man. It is for the successful study of these laws that all previous preparation should be made. It is for the study of these laws that our medical schools have been established, and those courses of lectures and instructions given to which my present address is preparatory.

With regard to the preliminary studies which most fit the mind for distinction in medicine, I will not venture a decided opinion. It seems to be admitted on all hands, that a training in the classical languages and mathematics is best adapted for general education. That a knowledge of languages and mathematics are both most useful adjuvants to the study of physiology and pathology, I freely admit; but that they are either of them essential to the education of the physician and surgeon, I must most emphatically deny; and that either or both should be forced upon the whole or a part of our profession, as necessary to its practice, I regard as an error calculated deeply to injure its interests. If there be one profession more than another which could adopt as its motto the sentence, "*Nihil humani a me alienum puto*," it is the medical. There is scarcely a branch of knowledge so recondite, or a fact so unimportant, that it may not, at one time or another, be successfully employed by the medical man; at the same time, there is no pursuit that offers so many points of deep interest to minds of that peculiar structure which especially fits them for intense research in one department, as the result of an entire unfitness for almost every other. There is no department of our medical organisation that is more to be lamented over than the tendency to give a fictitious character to many of our medical examinations. It is not to the honour of our boards, nor to the advantage of our profession, that in examinations intended to test the fitness of gentlemen to exercise the practice of medicine, any knowledge should be demanded, which, however sincerely attained, or however valuable in itself, is forgotten in less time than it was acquired, and which, it is known, may be "got up" by what is technically called a "cram." Such knowledge is not open to the charge of danger from its being superficial; it simply wastes time in learning, and is useless when attained.

The most important department of early education for the medical man is the acquirement of habits of observation. These habits can only be formed by directing the mind to the observation of facts; and, although the increase of intelligence, in a nation so thoroughly practical as Great Britain, is necessarily attended with this habit, yet, in our plans of education, as at present conducted, little or no attempt is made to develope it in a systematic manner. Young men are frequently sent from school to learn the medical profession without a notion of the most elementary facts of the sciences they are about to study. Let no one, however, be alarmed; there are no difficulties that perseverance will not overcome, and nature has no secrets that she will not deliver up to the industrious inquirer.

What, then, constitutes the sciences of physiology and pathology? The knowledge of all those facts of structure and function that occur in health and disease in the human body. In order to have an idea of what these facts are, it is not alone sufficient that we interrogate the human body in its totality. Low, indeed, would have been the condition of his science had not the physiologist sought, in the simpler forms of matter out of the human body, the explanation of the phenomena that occur within it. It is in the fact, that the animal organism consists of elements and forms of matter which occur in the external world, that we see the necessity for the medical man cultivating the whole range of the natural sciences. Some of these, as chemistry and botany, our examining Boards dictate shall be studied independently of the proper physiological and pathological courses. The importance of a knowledge of physical laws will be apprehended, when we find that the human body is composed of parts which have the same relation to heat as the matter of the universe, and presents itself in the form of solids, liquids, and gases. The solid parts obey the laws of statics and mechanics; the liquid of hydrostatics and hydraulics; the gaseous of pneumatics. There is no one of these departments of science that has not presented the physiologist with facts and laws that have enabled him to explain most important functions of the animal body. Let me give, as an instance, the investigations of natural philosophers on the attraction of liquids and gases for solid substances, and of gases for each other, which has resulted in the highly probable explanation of the manner in which the oxygen of the atmosphere passes, during respiration, through the capillary membrane into the blood in the lungs, and the carbonic

acid of the blood passes out into the lungs, to be thrown back into the atmosphere.

But there are departments of physical science which seem to promise yet more than has been done by those which I have mentioned. It is the province of physical science to investigate the properties of those grand forces in nature which are called attraction, heat, light, electricity, magnetism, and galvanism. The influence exerted by these agents upon inorganic matter has long been studied, but at the present day we seem on the verge of great discoveries with regard to their agency in organic life. Early in the history of man, the great facts of planetary influence exercised his untutored reason, and perhaps laid the foundation for a belief in the mysteries of astrology; but, much as we may despise the weakness that confounded coincidence with cause and effect, our dependence for heat and light on the central planet of our system is still the primal fact of organic existence on our globe. It is that which determines not only the existence of animal and vegetable beings, but, in a great measure, their distribution in space: how far in time has yet to be seen. How heat and light acts has been hitherto an inscrutable, and hence a neglected question. But recent researches have shown that electricity, galvanism, and magnetism are but manifestations of the same force. The same train of reasoning by which this result has been arrived at has led to a high probability that heat and light, chemical attraction and motion, are also correlative powers. That one of these forces can be converted into another is well known, hence the probability of their being different states of the same power. The direct influence these agents exert on the functions of living organisms, has resulted in the daring inquiry, May not the vital force itself be correlative with the physical forces? The minds of many physiologists have been prepared for this question by the constantly increasing sufficiency of physical laws to account for phenomena which had hitherto been attributable to a hypothetical *vis vitæ*. The discovery alone of the chemical action of the rays of light, has put us in possession of a means of explaining the marvellous agency of light on the growth of vegetable structures; and the path opened up by the recent researches of Newport, Mattencci, and Carpenter, seem calculated to open inquiries of the deepest interest to the physiologist, and of great practical importance to the medical man. I need not say, then, that a clear apprehension of the nature and laws of these forces is necessary to the medical man, not only for the understanding what has been already done in relation to their agency in the human system, but to assist his investigations in the path in which it is most likely to be crowned with success. Even were the researches of modern physiologists of less importance than they are, and this field of inquiry one of less promise, the nature of these agencies should be understood by medical men, in order to prevent their falling into error. An imperfect knowledge of the true nature of electricity, galvanism, and magnetism, has led to the most absurd speculations on their agency in health and disease, as well as an unreasonable use of them as therapeutical agents.

But I must pass on: these remarks will, I hope, suffice to direct attention to the importance of studying physical laws out of the human body, in order that we may understand those phenomena which are regulated by them in the human body. If the study of physical laws is of importance on account of the aggregated parts of the system obeying them, it is of no less importance to the physiologist that he should understand the laws by which the ultimate elements of which the body is composed are bound together to form its solid and liquid parts. The value of the study of chemistry has always been felt by medical men; and some of the most curious phases of the practice of medicine have been presented by the influence of chemical studies. If, however, there ever was a time when a knowledge of the laws which regulate the composition and decomposition of elementary bodies was of importance to the physiologist and pathologist, it is now. Within the last few years the chemist has vastly increased our knowledge of the properties and combinations of elementary bodies, and more especially of those which enter into the composition of vegetable and animal structures. By these discoveries, many of the phenomena occurring in the body, which had heretofore been attributed to the action of a vital force, are seen to depend on chemical changes. The laws of chemistry give us the most probable explanation of the changes which occur in the food, as the result of the absorption of oxygen during respiration, and the subsequent production of animal heat. By chemistry we have been enabled to analyse the food of man, to distinguish it into two great groups, one of which is employed in furnishing the materials for supplying the demands of waste and growth, whilst the other maintains the respiratory functions. Not only has this been done, but the food has been followed, traced into the blood, and from thence to the various tissues of the body. Here it finds no resting place, but passes into new forms, and is again, after having undergone various changes, passed out of the body in the excretions. Much has been done by chemistry towards the determination of the specific nature of the various excretions, so as to give us the law of their healthy composition and quantity. This has been more especially done with regard to the excretion from the kidneys, the chemical examination of which throws most important light upon general conditions of the system. It is thus that we find both physiology and pathology are deriving invaluable aid from the labours of the chemist. It is from chemistry, too, that we may expect the greatest assistance in the treatment of disease. If a certain combination of elements indicated health, and another disease, and if the combination indicating disease implied more especially a deficiency in quantity of particular elements, we might expect, *à priori*, by supplying these, that health would be restored. Although few of the problems of the practitioner of medicine are so simple as this, instances are not wanting where the pathological condition, and the means of its removal, are as little complicated as I have stated. Take, for instance, those conditions of the blood in which a chemical analysis shows that there is less iron than in healthy blood, in these cases the administration of a few doses of any of the common preparations of iron are attended with a correction of the state of the blood, and a disappearance of the symptoms of disease with which it might have been attended. How many of the pathological conditions of the system may yet be found to depend on chemical conditions, which may be directly relieved by the application of remedies calculated to alter those conditions! At the same time, I feel that I should not be doing my duty did I not warn the student against being led away by the seductive speciousness of chemical theories of the nature and treatment of disease. The province of the physiologist and pathologist has lately been invaded by the mere chemist, and without a thought of how chemical laws may be changed or modified when matter is placed under new circumstances, the results of experiments on substances in retorts and crucibles have been at once transferred to the stomach and lungs; and, as the consequence of erroneous theories, absurd remedies have been introduced, and grievous practical errors been committed. Tubercle has been removed from the lungs, and submitted to various re-agents in the laboratory, and those have been recommended as remedies, which have been found to act as solvents on the morbid deposit. It would be well, for the credit of our profession, if such exhibitions were so unfrequent, that they could be passed over in silence; but, unfortunately, the occurrence of them is "neither few nor far between." An error, as serious, though more subtle and refined, is that which some eminent pathologists have fallen into, in accounting for the formation of compounds out of organic elements known to be present in the human system, without any evidence that those changes occur which they suppose. Thus, the formation of oxalic acid in the system has been accounted for by the supposition of the withdrawal or addition of oxygen to sugar, urea, lithic acid, or carbonic acid, as the case may be. It is only, then, by a competent knowledge of chemistry that the medical student will be able, on the one hand, to comprehend some of the most important changes that occur in health and disease; and on the other, be delivered from first becoming himself a victim, and then making others so, of wild and improbable theories, leading to a practice destructive of human life. The amount of knowledge of chemistry demanded of the medical man may be a question, but it should never be less than would enable him to make with accuracy the analysis of those substances which can throw any light upon disease.

We might perhaps stop here to inquire as to whether there are any phenomena of the human system that may not be reduced to physical and chemical laws. It would be an interesting inquiry to take up any series of facts connected with the living organism, and, after accounting for all we

could upon physical and chemical principles, ascertaining the amount of residuary phenomena which are ordinarily attributed to a vital principle. I apprehend, that in proportion as we were cognisant of the former, we should find less to ascribe to the latter. Is there, then, no distinction between the organic and inorganic kingdoms of nature? Yes; much. The grand distinguishing feature, however, is that of form. A plant or an animal differs more from carbonate of ammonia in form than in composition. It is in the forms more than in the functions that a difference is found to exist between plants, and animals, and minerals. The arrangement of the particles—the form of the plant and animal—determine those modifications of physical and chemical forces which result in the phenomena we call the functions of life. It is then in the formative force, that power by which each individual species of plant and animal grows up into its own form and into that of no other, that we have to seek the true source of life and the fountain of all organised existence; but it is precisely here that observation cannot aid us, and faith in science as in religion assists us where sight fails, and we feel we are in immediate contact with Deity, and that His hand alone moulds and immediately sustains the varied forms of animal and vegetable life. But these forms can be observed, though the force which directs them escapes us. The modifications they produce in physical and chemical laws can be made the subject of our experience, though to make one living organ or imitate a single living cell be denied us. The study of these forms is essential to the human physiologist and pathologist, not only in man but throughout the whole range of organised existence. If man alone is examined in this point of view, a most incomplete idea would be gained of the laws which govern even his organisation. The grand discoveries in anatomy and physiology which have been recently made by Oken and Owen, by Schleiden and Schwann, and which have given a new direction to all our inquiries into the structure and functions of man, have not been made on the human body alone, but on various species of plants and animals. Just as we found that the physical and chemical laws acting in the human body could be best studied on the simpler forms of matter out of it, so we find that the complicated organisation of man can alone be understood by studying lower and more simple beings. In this fact consists the necessity for the physiologist to study vegetable structure and function as the simplest conditions of organised existence. It was from observations made on the cells of plants, that Schleiden ventured to assert their universal presence in organised beings, and gave a detailed account of the history of their development. The observations of Schleiden on the plant were followed by those of Schwann on the animal, and the result has been the recognition of the cell as the prime element and universally essential agent of organisation. In the same manner the laws of morphology, the idea that every part of an organised being, however varied its form, was the modification of some primitive type, was first demonstrated in the parts of the plant. The poet Göthe led the way to all the great discoveries in morphology, when he announced that the parts of the flower in plants were but modifications of the leaf. This was followed by the brilliant demonstration of Oken, that the parts of the skull were but modifications of the vertebra. This idea, opposed by some, and ridiculed by others, has obtained an able exponent in our gifted physiologist Owen, who, by its aid, has thrown a new interest over the study of skeletal anatomy, and unravelled some of the mysteries of human organisation. The vegetable kingdom has not only claims on the attention of the physiologist, as affording the simplest facts for illustrating the laws of morphology and the structure of cells, but also in its being the ultimate source of food to the animal kingdom, and supplying a large number of those agents which, acting powerfully on the system, are used as remedies in states of disease. Nor are these special departments of botany all that demand notice from the physiologist, for in the functions performed by the plant, we discover close and immediate relations with those of animals—relations so intimate, that without plants it would be impossible for animals to exist on the earth. The purification of the atmosphere by the absorption of carbonic acid gas, the maintaining the due equilibrium of oxygen and nitrogen in the air, the regulation of heat and moisture, as well as the elaboration of the food of the animal, and probably an influence on the imponderable forces, are the results of the agency of plants. In our medical courses, the study of botany is no longer a mere adjunct to the course on materia medica, but an integral part of the science of physiology as a whole.

With the study of plants, the physiologist must combine that of the lower animals, in order that he may trace the uniformity of organisation, as well as the antagonism of function that exists in the two organic kingdoms of nature. He will find that, whilst the laws of cell-development and growth are the same in both classes, the functions which the cells perform are quite different, although having the same end in view. Thus, during the whole of their life the cells of plants are distinguished by absorbing carbonic acid and giving out oxygen; whilst those of animals absorb oxygen and give out carbonic acid. Besides these general resemblances and distinctions, which the study of the animal kingdom enables the physiologist to make out, he finds in its lower forms the simplest conditions of those organs and systems of organs, which attain their highest complexity in man. In the infusoria and zoophytes, animal structure may be studied independent of the nervous and muscular systems, which so thoroughly distinguish the higher forms of animal life. It is in the radiate group of animals that we meet with the simplest forms of muscular and nervous structure. From the observation of single fibrils and scattered points of these tissues, we may proceed through the whole animal series, and have presented, severally and separately, in particular groups of organs, those portions of the muscular and nervous systems which we find inextricably interwoven in man. In every other system the same remark applies; so that the real significance of organs in the human body can only be understood by tracing the history of their development in the lower animals. Not only do the organs of the lower animals find their true significance in the matured condition of the highest animal, man, but we find that he, in arriving at this condition, has passed through, during his growth, all those steps of organisation which we regard as typical of certain groups of the lower animals. The study of these transitionary conditions in man, and their comparison with lower structures, have furnished the principles of a new branch of science, to which the name "teratology" has been given, and which refers to the operation of definite laws, the occurrence of those departures from the normal human form to which, from their supposed unaccountable nature, the term "monster" has been given. These are some of the points which render it imperative that those who study human physiology and anatomy should be acquainted with the principles of zoology and comparative anatomy.

Up to this point, however, the medical student will but, as it were, have been on the threshold of his peculiar study, that which distinguishes him amongst men of science, and gives him a special employment in relation to his fellowmen. Identical as the matter of the human body is with the matter of the universe, obedient as it may be to the same physical and chemical laws, uniform as may be its growth with that of vegetable and animal structures, and homologous as its organs may be with those of lower animals, it yet has a special form, modifying all its functions, and this claims our most devoted attention. From very early times, the value of dissection, as a means of ascertaining the position of the various parts and organs of the human body, has been recognised by medical men. This practice has not been less resorted to with an increase of knowledge derived from other branches of science, but its importance has been increasingly estimated, and almost every improvement in practical surgery, and the diagnosis of internal diseases has been connected with its culture. Let a man's accomplishments be what they may,—however acute his senses and matured his judgments,—if he wants a knowledge of anatomy, his diagnosis of disease will be valueless, and his treatment mere guess-work. Nor should the man anxious to command every portion of knowledge that can contribute to his power of alleviating disease, forego the study of the physiology of the mind. Distinguishing man from the surrounding creation, we find his mental phenomena exercising the most decided influence over the whole of the functions of the body. Connected especially with a part of the nervous system, we find states of the mind producing, through the influence of this system on the body, various forms of disease; and we find, again, morbid states of the system yielding to the influence of conditions of the mind. As yet, the study of the laws of mind has not taken its proper position amongst the medical sciences: but there is, at the present day, an increased attention to psychological medicine, which, it is to be hoped, will result in the discovery of the true relations between mind and

body, and a consequently improved treatment of the diseases of both.

I have thus endeavoured briefly to sketch what may be regarded as the field of a medical man's study before he commences the practice of his profession. I have constantly used the word Physiology in its most extended sense, as embracing all the phenomena of the healthy organization, and I have purposely not separated the consideration of pathology from physiology. Differing as they do in the phenomena they contemplate, the one embracing diseased actions and structures, the other healthy ones, yet these occur in the same body under the influence of the same general laws, and it is as impossible for a man to be a pathologist without first being a physiologist, as it is that he should be a good practitioner of medicine without being both. In order to know what disease is, we must first know what is health. The normal must be understood, before we can conceive of the abnormal. This thought will bring us to the consideration of the medical profession as an art. The various knowledges to which I have before alluded constitute the theory of medicine. They may be either acquired from the testimony of others, or by direct observation for ourselves. They have been called the science of medicine, and a man may be thoroughly acquainted with them without being able to apply them with success, just as a man may understand the whole theory of calico dyeing, and yet not be able to produce a piece of print that could be worn. In what, then, consists the practice of our profession? Mainly in the restoration of a diseased to a healthy state of the system, — the delivering the body from the dominion of pathological, and placing it under the control of physiological laws. How, then, is this great object to be effected? First, by ascertaining the actual condition of the body in a state of disease; and, secondly, by the use of means calculated to produce the desired change. In endeavouring to ascertain the amount of departure from health exhibited by the human body, and the causes of this departure, we may divide our inquiries into two heads in relation to time,—the past and the present. It is frequently the case, that the true significance and origin of the present symptoms of disease can only be understood by a reference to the past. In some states of the system this is so necessary, that not only have we to go back to the early childhood of an adult, to seek for the first commencement of a diseased condition, but to inquire into the health of parents and grand-parents, or even the peculiarities distinguishing families and races. Incidents of apparently no moment may lay the foundation of serious disease, and an accurate knowledge of which can alone lead to a correct appreciation of the symptoms presenting themselves. As an illustration of this remark, I may perhaps be allowed to allude to the case of a gentleman who was educated in this school. He had for some time suffered from cough, attended with expectoration; there was dulness over a particular spot in one lung; he wasted, and eventually spat up blood. Judging from the present symptoms there seemed little doubt that this was a case of pulmonary tubercle. But a few weeks ago, this gentleman coughed up a mass which, on being opened, turned out to be a small cyst, enclosing a split-shot, such as is used for sinking the line by anglers. The sufferer, although he had been a keen fisherman, could not recollect ever having swallowed the shot; but, could such an incident have been made out, it would have at once explained the nature of the symptoms, and relieved the patient and his friends from a world of anxiety. Diseased conditions take their origin in a vast variety of external and internal conditions, which should be diligently inquired after; and which, although they may no longer be acting on the system, will frequently suggest the most appropriate means of cure.

But the results of the past are found in the present. It is only by an accurate knowledge of present derangements that the past can be interrogated with advantage, or its lessons fully understood. In the investigation of present symptoms, the practitioner must not only apply the knowledge of principles which he has gained from the study of physiology and pathology; but he must use the same methods and means in each individual case as have been employed for the observation and confirming the facts of these sciences. All facts are observed through the senses, and chiefly the eye, the ear, and the touch. Smell and taste, however, are occasionally employed with great advantage. In the exercise of the senses, especially those of sight and hearing, much has been done to increase their power by artificial arrangements. The astronomer, by making use of the well-known relations of bright and transparent substances to light, has succeeded in bringing under his direct observation objects millions of miles distant, and totally invisible to the unassisted sense of sight. The same properties of matter have given to the physiologist a no less important instrument in the microscope. What eyes are to the blind, the microscope is to those who see. Imperfect, indeed, would be our conceptions of the anatomy of the human body, if we were dependent on the unassisted eye. We can now demonstrate the absurdity of many of those general theories of disease that have been propounded by the great men who have practised medicine from the time of Hippocrates to that of Cullen and Brown, not because we are wiser in our day and generation than they, but because we have increased means of observation. That which was an inference to the great discoverer of the circulation, can now be demonstrated to every tyro in medicine. The circulation of the blood in the capillaries was inferred, but never seen till the microscope was employed to observe it. I have before alluded to the results of the study of the structure and growth of the tissues of plants and the lower animals; but this study could not have been pursued but with the aid of the microscope, and none of the results of our knowledge of the functions and development of cells upon physiological views could have been obtained. In the examination of morbid structures the microscope has had a more decided influence on our pathology than it has even had on our physiology. Rude and imperfect, indeed, was our knowledge of the changes undergone by the blood during the process of inflammation, till the microscope revealed their intimate nature. Of the characters of those deposits, which, under the name of tubercle and carcinoma, commit such frightful havoc in the system, and which still, as diseases, are the opprobrium of our art, we knew little or nothing till the application of the microscope, which has given a clue to their formation and development that afford bright anticipations of a knowledge that will lead to a future more successful treatment. In unravelling morbid conditions of the body, the sole hope of the pathologist for the future is the use of the microscope. Without it, his science would stand still; but with it, he may go on to new victories and fresh triumphs. But is it of any practical value? is the inquiry I have heard made by those who have witnessed the success of medical men who never use it. To this inquiry I answer at once, that, in many diseases, it is a most valuable addition to our means of inquiry; and that in some, a diagnosis can alone be made by its use. In saying this, I do not mean to advise that a medical man should carry about with him a compound achromatic microscope, but that he should be able to apply this instrument in cases demanding its use. But even were the microscope of no direct practical value, such has been its use in enabling us to form correct views of the nature of healthy and diseased structures and their actions, that I question whether there is any medical man who has at all kept up his reading, however little may be his practical acquaintance with the instrument, that has not been influenced in his practice by its discoveries. A new method of research may do as much good in medicine by exploding old errors, as by suggesting new remedies.

At the same time, this instrument is liable to abuse; the very power which it gives us of examining minute structures is a power which may multiply errors a hundredfold. Like every other instrument, it requires skill and judgment in its use. The facts it reveals must be carefully observed, and all imagination on the part of the beholder suppressed. If there is reason to be careful of allowing an analogy of form to indicate an identity of action, in things observed by the naked eye, there is much greater necessity for using the same precaution in things observed by the microscope. In the world of cells which it opens up to us in all organised fluids and structures, an identity of form is so constantly shown under very different circumstances, that, if we were hence to infer an identity of function, we should be led into the most serious mistakes. Obvious as this appears, it has been often done, and perhaps some of our received views will have to be modified on this ground. Early in the use of the microscope, it was found that the spiral vessels of plants presented a structure analogous to that of the breathing pores of insects, and it was inferred that they performed the same function. A more recent instance of the same fallacy

was the discovery of cells—supposed to be vegetable—of the same form in the intestines and rejectamenta of those who died of cholera, as were found in the air and water of towns infected with this disease, and the conclusion drawn that these bodies were all of the same nature, and acted as the exciting cause of that dreadful pestilence. Such occurrences should not lead us to disparage this instrument, but should quicken our vigilance in its use.

I have said, that the sense of hearing is employed in the diagnosis of disease: and perhaps the use of this sense by the medical man is one of its most remarkable applications for obtaining a knowledge of the conditions and properties of matter in the whole range of the natural sciences. In the employment of the stethoscope, however, the power of the ear to gather sound is not so much increased as facilitated and directed. The ear itself, in fact, may as frequently be employed successfully without this instrument, and in percussion no medium is used for the conveyance of sound. I need not here dwell on the importance of auscultation and percussion as means of obtaining information with regard to the healthy or unhealthy condition of the solids and fluids of the body. All parts of the body vibrate when struck, and admit of comparisons being made between the sounds they afford in a healthy and diseased state. The movements of the fluids, especially the blood, and the passage of air, are accompanied with sounds which equally admit of comparison in health and disease. The nice distinctions which can thus be made between healthy and unhealthy sounds, and the precision with which even slight derangements of structure can be indicated by this means, can only be appreciated by constant practice at the bedside; and no small share of the attention of the medical student is demanded by this branch of his studies alone.

After the two means of observation to which I have alluded, I will only refer to a third, which seems, with them, to distinguish the modern practice of medicine. I mean the application of tests, re-agents, and chemical analysis for the purpose of obtaining a knowledge of the difference of composition between healthy and diseased structures, and more especially secretions. If I have estimated aright the influence of chemistry on the present position of the sciences of physiology and pathology, then there can be no doubt of its value, both as a means of diagnosis and as suggestive of methods of cure.

With this brief notice of some of the means to be used in diagnosis, I now come to the second part of the duties of the medical practitioner—the arrangement of conditions for the cure of disease. There is perhaps no greater error into which a medical man can fall, than to suppose that in all cases, or even the majority of cases, the termination of disease or the restoration of health depends on his efforts alone. The security of humanity amidst false systems of medicine and the quackeries and impostures to which it submits, lies in the fact of the general tendency of disease to terminate in health. This fact was not unknown to the older practitioners of medicine, and they attributed it to a hypothetical power—the *vis medicatrix naturæ*. It is to this beneficent tendency that we may ascribe the cures of the self-styled homœopathic practitioners, rather than to the infinitesimal nonentities which they dignify with the name of remedies. But, whilst the medical man has this powerful adjuvant in the system, it is his duty to see that it has fair play, to withdraw that which retards its action, and to administer that which will assist it. How, then, are we to be guided in the administration of remedies? You will be told by experience, and experience alone. But what experience? Surely not mere experience of cure. In this word experience lies the grand source of fallacy in all erroneous systems of medicine, and the modern quackeries of hydropathy, homœopathy, and the like. If we confine ourselves to mere results, and agree to regard the termination of disease as proof that whatever has been administered is the curative agent, then we must give credit to the infinitesimal doses of the homœopath, and the vaunted nostrums of the advertising quack. To be guided in the use of remedies by the mere experience of cure, is to be betrayed into the hasty conclusion which leads the unreasoning multitude. A remedy is a cause,—a cause of change in the human body; and before we can admit anything into the list of remedies, it must put in some claim to be considered as a sufficient cause. Now, an infinitesimal dose is not a sufficient cause. It is an axiom in physics, that effects are increased, decreased, and changed with an increase, decrease, or change of their causes. It is, therefore, simply an absurdity to say, that the effects of a remedy are increased by decreasing the dose. It is an infinite absurdity when it is asserted, that this can take place through an infinite series. It would be a marvellous thing if nobody ever died under homœopathic treatment; but no amount of evidence would prove that it was due to infinitesimal doses. We sometimes hear of practitioners putting homœopathy to the test of experiment; but no man who apprehends the principles of right reasoning would think of wasting his time on such a chimera, whilst the chances are that those who do try it will embrace it; for the unphilosophical notion they have formed of the kind of experience which is to guide their judgment must terminate in self-delusion.

How, then, is experience to guide us in the application of remedies? By affording us evidence that the administration of an agent, or series of agents, has been followed not only by the removal of disease, but that these agents were capable of producing the changes attributed to them. Differing, indeed, in degree, is the amount of evidence we have of the power of different remedies to effect the changes which terminate disease, but just in proportion as the evidence is strong of a particular substance being capable of exerting a particular effect, are we justified in pronouncing that the effect has been produced by the agent. Thus, when we administer croton oil in constipation of the bowels, and this condition is relieved, it is a matter of almost certainty, that the change was effected by the croton oil, because we previously knew that it was in accordance with its action on the system. On the other hand, the beneficial effect of sarsaparilla in syphilis is very doubtful on the ground of our little certain knowledge of the effects of this agent on the human body. I might multiply these problems, but my object has been, whilst pointing out the natural course of our professional studies, to warn the younger portions of my audience against those principles of reasoning which have led to the introduction amongst our own body of the most shallow system of therapeutics that ever disfigured its history. Nor would I confine these remarks to my professional hearers. There may be amongst my audience unprofessional persons who, led away by the mere fact of cure, might think it a matter of indifference as to whether one system or another were adopted; but I would ask them, as they value their lives, to examine the trustworthiness of such principles as those advocated by the disciples of Hahnemann, and not leave to the hour of need the decision of a question which, wrongly answered, may be the cause of death or irreparable injury.

Although the treatment of disease to the unobservant seems the most perfected part of our art, in reality it is that of which we know least. The history of the reputation of various remedies would serve as the best commentary on this observation. Very limited indeed is the list of agents which the universal experience of medical men has shown to be of value in the treatment of disease, but these few are among the most valuable we can employ. In order to place therapeutics on a sounder basis, we must still accumulate evidence of the action of remedies in health and disease. To do this, we must know the natural progress of disease, as well as the natural action of the remedy, before we can draw satisfactory conclusions with regard to the merits of particular remedies, or sets of remedies, in particular diseases. Although we are improving, our system of reporting cases is still inadequate to meet the demands of the scientific investigator of the action of remedies. An inference may be correct on the action of a remedy in a single case, but the probability of its truth becomes constantly increased by numbers; but, in the majority of instances, single cases, nay, even hundreds of cases, are insufficient to establish the utility of one system of treatment as compared with another; hence the necessity of reporting accurately large numbers of cases, and grouping them so as to admit of comparison. I know how figures may mislead, and the objections that may be urged against entirely relying on the results of counting, but the fault lies with ourselves and not with the method. Figures cannot err, but the facts which they represent may be badly observed, and their results of no value. In the use of figures, then, our first care should be to secure that the facts represented by any series are all of the same kind, or our figures will only mislead. We may expect, however, that in large series, like those, for instance, of the Registrar-General's Re-

port, that the large numbers reported on the whole will cover the errors committed in individual cases. But the Registrar-General's Reports are simple, indeed, compared with those which it would be necessary to draw up for the purpose of giving decisive results on the doubtful questions relative to the treatment of disease. Whether, however, the student of medicine gives himself to the work of observation on the grand scale I have proposed or not, there is an absolute necessity that he should devote himself to the observation of disease at the bed-side. If he records his observations so much the better, as others may benefit by them as well as himself, but nothing will make up for that want of tact, that skill in reasoning, which often goes on unconsciously to the individual, which is acquired by the personal investigation of disease and watching the effects of remedies.

But a lifetime would not suffice to make a man personally acquainted with all the forms of disease, and in other departments of human activity we are greatly dependent on the testimony of others. Particular aspects of disease occur so seldom, that when we meet with them we must act on the experience of others and not our own. This introduces us to another question, and that of some importance in our profession, the value of testimony. The testimony of a man is always of value in proportion to his truthfulness, his fitness to observe, and his means of observing. The propounders of theories,—those who crave for the distinction of successful practitioners,—the advocates of a new remedy, are frequently either so blinded by their fancied success, or so intent upon making out their own case or their own selfish advancement, that we may be excused accepting their experience or testing it by our own. Again, an observer, with all desire to record honestly what he believes himself to have seen or heard, may not be competent to the task of observing the particular facts he records. The more extraordinary the fact the more necessary it is to investigate the character of the observer, and where this will not stand the test it must not be allowed to govern us in theory or practice. Although a very unlikely observer and thinker may occasionally be favoured to discover a truth, this is no reason why we should trust to every one who imagines he has made a discovery, or investigate the claims of every pretender to the honours of a Harvey or a Jenner. We can afford to disregard being classed in the same category as those who opposed the theory of the circulation of the blood and the utility of vaccination, whilst we have no better evidence of the truth of the theories we are called upon to discuss than the blustering assertion of their ability to observe by those who imagine they have made them. To borrow an illustration of these remarks from another department of science, I may instance the recent announcement of the discovery of a sea-serpent. Now, the gentleman who made known this startling fact, however admirably fitted he might be for the task of commanding a vessel, furnished no evidence of his competency to observe or reason on this department of natural history; and, long before Professor Owen had demonstrated the doubtful nature of the observation, naturalists had discredited the account. The regions of quackery would afford, under this head, abundance of material for comment; but I leave these as an exercise for those who are interested in the problem; and I refrain from illustrations in legitimate medicine, lest I might be regarded as personal.

I have thus gone over the field of the studies of the medical student. In the classes of chemistry, botany, materia medica, anatomy, comparative anatomy, and human physiology, he will learn those first facts and principles which are to fit him for the practice of his profession; whilst, in the lectures upon therapeutics, pathology, surgery, and midwifery, and in the hospital, he will learn how to make use of his previous knowledge, and acquire the art of administering to the necessities of the sick and suffering. Although an introductory address offers the opportunity of saying something in favour of the special school in which it is delivered, I shall waive my privilege on this occasion. My colleagues need no introduction to the public, and our school, now in the twentieth year of its existence, can point to hundreds of successful medical practitioners who have been taught within its walls. We cannot boast Corinthian columns, long-drawn aisles, or suites of lecture-rooms, but we feel strong in our esteem for each other, and for the founder of this school, and in the sympathy and affection of our pupils. I feel confident that I may say of all my co-labourers, that they are more anxious to impart solid and useful instruction to their pupils than to make a display of minor advantages, and to furnish sound practitioners of medicine rather than brilliant academic reputations.

I do not mean to say, gentlemen, that it is a matter of indifference whom you have for your teachers; but this, I am prepared to say, is a matter of very secondary influence on your career compared with your own control over your characters. You have entered on an arduous undertaking, and you must never forget, that in order to be successful you must make up your minds to work. All enjoyment and relaxation will be doubly relished when earned by due attention to study. Be not disheartened by difficulties; what others have surmounted before you be assured that you can surmount. Persevere; no step in life is more difficult than the next, and each one is bringing you to your goal. Some will go faster than you; but compare not yourself with others in your weakest points; look at your strongest. Each man has qualities of his own which recommend him in society; these are your gifts to use for your own and others' advantage. Find these out, and be thankful that you have so much. Above all, avoid idleness. Take formal leave of leisure for the rest of your life. Always have some object, some purpose, in spending your time. Even your hours of relaxation from severe studies may be made to contribute to your stores of knowledge, to the refinement of your taste, and the elevation of your heart and mind. Avoid the smoking-room and the gaming-house. Yield not to the first temptations to vice. Maintain the purity of your youth, and let not the pleasure of ministering to the need of the afflicted be darkened by the thought that you have ever been its cause.

We are often told, gentlemen, that ours is a noble profession; but, if men did but know it, every human occupation may be made noble, and there is none so exalted that may not be made mean and degraded. It depends on yourselves as to whether the profession you have chosen be noble or mean. Unless you possess the noble heart and noble mind, the exercise of the art of medicine will be to you as complete a piece of drudgery as the blacking shoes or sweeping streets. In order to make the exercise of your profession noble, your aims must be high, and your motives pure. I cannot suppose you have chosen it because it is the road to wealth or honour, for it is not. Few, indeed, are the members of our profession who acquire wealth, and fewer still are the positions of honour awarded to us by society or by the State. If, then, you have been led to join our ranks upon the supposition, that wealth and worldly distinction will attend your path, the sooner you give up your pursuit the less of pain and disappointment you will have. But, if you have embraced the medical profession in the cheerful faith, that by "the sweat of your brow you shall earn your bread," and that, satisfied with this as your physical lot, you will seek your reward in the exercise it affords to your intellectual and moral faculties, then you will not be disappointed. Cast away from you all anxiety about worldly success as a thing that must always follow all earnest labour, and fix your mind upon the great work you have before you. You are called to the divine task of alleviating the sufferings of your fellow-creatures; let the thought constantly inspire you in your studies, that the more you know the better fitted will you be for this great mission. Early learn to seek, in your own consciousness of rectitude, that satisfaction which you will in vain look for without. It is in the serene sense of having done their duty to God and their fellowman that martyrs and heroes have found a happiness that the smile and applause of the world could never afford. Do not imagine that I am addressing you in the language of hyperbole; you will be constantly called upon to exercise your profession where only the spirit of the hero and the martyr can sustain you. The dangers you will have to meet amidst pestilence, are greater than those of the soldier in the battle field, and you will have to meet them alone. Should you fall, as the members of our profession so constantly do, whilst fighting with deadly disease, no funereal honours will attend you, no public provision awaits your family; but in the midst of all this, the feeling that you are suffering for the good of others, will make you partakers of the same joy that He felt who died for the world; and yours will be the honour to be co-workers with that glorious host of men, by whose toils, and labours, and self-denials, the world has been ever blessed.

RULES AND REGULATIONS
OF
EXAMINING MEDICAL BODIES
IN
ENGLAND, SCOTLAND, AND IRELAND.

UNIVERSITY OF LONDON.

Bachelor of Medicine.

Candidates for the degree of Bachelor of Medicine shall be required.

1. To have been engaged during four years in their professional studies at one or more of the institutions or schools recognised by this University.

2. To have spent one year at least, of the four, in one or more of the recognised institutions or schools in the United Kingdom.

3. To pass two examinations.

First Examination.

The first examination shall take place once a year, and commence on the first Monday in August.(a)

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—

1. Of having completed his nineteenth year; 2. Of having taken a degree in arts in this University, or in a University the degrees granted by which are recognised by the Senate of this University;(b) or of having passed the matriculation examination;(c) 3. Of having been a student during two years at one or more of the medical institutions or schools recognised by this University, subsequently to having taken a degree in arts, or passed the matriculation examination; 4. Of having attended a course of lectures on each of four of the subjects in the following list:—Descriptive and surgical anatomy, general anatomy and physiology, comparative anatomy, pathological anatomy, chemistry, botany, materia medica and pharmacy, general pathology, general therapeutics, forensic medicine, hygiene, midwifery and diseases peculiar to women and infants, surgery, and medicine. 5. Of having dissected during nine months. 6. Of having attended a course of practical chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 7. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins.

The fee for this examination shall be 5*l*. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination the fee shall not be returned to him; but he shall be afterwards admissible to the first examination without the payment of any additional fee.

Candidates shall be examined in the following subjects:—Anatomy, Physiology, Chemistry, Botany, Materia Medica and Pharmacy.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Monday, Anatomy and Physiology, by printed papers; Tuesday, Chemistry, by printed papers; Wednesday, 10 to 12, Botany, by printed papers. Afternoon, 3 to 6; Monday, Anatomy and Physiology, by printed papers; Tuesday, Materia Medica and Pharmacy, by printed papers. To commence on Friday, at 10: Chemistry, by *vivâ voce* and experiment; and Materia Medica and Pharmacy, by *vivâ voce* and demonstration from specimens. To commence on Tuesday, in the following week, at 10: Anatomy and Physiology, by *vivâ voce* demonstration from preparations, and dissection.

On Wednesday morning, in the week following the commencement of the examination, the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed; and a pass certificate, signed by the registrar, shall be delivered to each candidate.

Such candidates only as in the opinion of the examiners are admissible to the examination for honours shall be placed in the first division.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the first examination may be examined for honours in any or all of the following subjects:—Anatomy and Physiology, (candidates may illustrate their answers by sketching the parts they describe;) Chemistry, Materia Medica and Pharmaceutical Chemistry, Structural and Physiological Botany.

The examinations shall take place in the week following the commencement of the first examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Thursday, Anatomy and Physiology; Friday, Chemistry; Saturday, Structural and Physiological Botany. Afternoon, 3 to 6: Thursday, Anatomy and Physiology; Friday, Materia Medica and Pharmaceutical Chemistry.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the pass examination.

Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects, and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in anatomy and physiology, the candidate who shall distinguish himself the most in chemistry, and the candidate who shall distinguish himself the most in materia medica and pharmaceutical chemistry, shall each receive an exhibition of 30*l*. per annum for the next two years.

Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of 5*l*.

Under the same circumstances, the candidate who shall distinguish himself the most in structural and physiological botany shall receive a gold medal of the value of 5*l*.

Second Examination.

The second examination shall take place once a-year, and commence on the first Monday in November.

No candidate shall be admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—1. Of having passed the first examination. 2. Of having, subsequently to having passed the first examination, attended a course of lectures on each of two of the subjects comprehended in the list above, and for which the candidate had not presented certificates at the first examination. 3. Of having, subsequently to having passed the first examination, dissected during six months. 4. Of having conducted at least six labours. (Certificates on this subject will be received from any legally-qualified practitioner in medicine.) 5. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months, and lectures on clinical medicine. 7. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. (Certificates on this subject will be received from any legally-qualified practitioner having the care of the poor of a parish.) The candidate shall also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins.

The fee for this examination shall be 5*l*. No candidate

(a) The annual number of examinations will be increased at a future period, should it be found desirable.

(b) The degrees in arts of all universities in the United Kingdom are recognised by the senate for this purpose.

(c) The matriculation examination is the same for students in arts and for students in medicine.

shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be afterwards admissible to the second examination without the payment of any additional fee.

Candidates shall be examined in the following subjects:—Physiology, (the papers in Physiology shall include questions in Comparative Anatomy;) General Pathology, General Therapeutics, Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine.

The examinations shall be conducted in the following order:—

First Week.—By printed Papers.—Morning 10 to 1.—Monday, Physiology; Tuesday, Surgery; Wednesday, Midwifery. Afternoon, 3 to 6.—Monday, General Pathology, General Therapeutics, Hygiene; Tuesday, Medicine; Wednesday, Forensic Medicine. *Second Week.—By vivâ voce interrogation.*—To commence on Monday morning at 10.

On Monday morning, in the following week, the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed. And a certificate under the seal of the University, and signed by the Chancellor, shall be delivered to each candidate.

Such candidates only as in the opinion of the examiners are admissible to the examination for honours, shall be placed in the first division.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the second examination may be examined for honours in any or all of the following subjects:—

Physiology and Comparative Anatomy, (candidates may illustrate their answers by sketching the parts they describe;) Surgery; Medicine; Midwifery.

The examinations shall take place in the week following the second examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations shall be conducted in the following order:—

Morning, 10 to 1.—Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Midwifery. Afternoon, 3 to 6.—Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the pass examination.

Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them.

If, in the opinion of the examiners, sufficient merit be evinced, the candidate who shall distinguish himself the most in physiology and comparative anatomy, the candidate who shall distinguish himself the most in surgery, and the candidate who shall distinguish himself the most in medicine, shall each receive an exhibition of 50*l.* per annum for the next two years, with the style of university medical scholar.

Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of 5*l.*

Under the same circumstances, the candidate who shall distinguish himself the most in midwifery shall receive a gold medal of the value of 5*l.*

DOCTOR OF MEDICINE.

The examination for the degree of Doctor of Medicine shall take place once a year, and commence on the fourth Monday in November.

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this University, or a degree in medicine or in surgery at a university the degrees granted by which are recognised by the senate of this University. (a) Those candidates who have not taken the degree in this University shall produce a certificate of having completed their twenty-third year. 2. Of having attended, subsequently to having taken one of the above degrees in medicine. *a.* To clinical or practical medicine during two years in an hospital or medical institution recognised by this University. *b.* Or, to clinical or practical medicine during one year in an hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession. *c.* Or, if he have taken the degree of Bachelor of Medicine in this University, of having been engaged during five years in the practice of his profession. One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins.

The fee for the degree of Doctor of Medicine shall be 10*l.* No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be admissible to any subsequent examination for the same degree without the payment of any additional fee.

The examination shall be conducted by means of printed papers and *vivâ voce* interrogation.

Candidates shall be examined in the following subjects:—Elements of Intellectual Philosophy, Logic, and Moral Philosophy; Medicine.

The examinations shall be conducted in the following order: *By Printed Papers.*—Morning 10 to 1.—Monday, Elements of Intellectual Philosophy, Logic and Moral Philosophy. Candidates who have taken a degree in arts in this University, or in a University the degrees granted by which are recognised by the senate of this University, shall be exempted from this part of the examination.(a) Tuesday, Medicine—Afternoon, 3 to 6; Monday, A Commentary on a Case in Medicine, Surgery, or Midwifery, at the option of the candidate; Tuesday, Medicine. *By vivâ voce interrogation.*—Friday morning, at 10, Examination on the Answers to the Printed Papers, and on the Commentaries: and Examination for a Certificate of Special Proficiency in Medicine, Surgery, or Midwifery, as determined by the candidate's choice of the case for commentary.

On Monday morning in the following week the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed. And a certificate under the seal of the University, and signed by the chancellor, thall be delivered to each candidate.

If in the opinion of the examiners sufficient merit be evinced, the author of the best commentary on the case in medicine, the author of the best commentary on the case in surgery, and the author of the best commentary on the case in midwifery, shall each receive a gold medal of the value of 5*l.*

Any candidate may present a Thesis on a subject of his own choice. If in the opinion of the examiners sufficient merit be evinced, a gold medal of the value of 10*l.* shall be given to the author of the best Thesis. The examiners shall not be precluded from examining the author on the subject of his Thesis.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most at the examination for the degree of M.D. shall receive a gold medal of the value of 20*l.*

Regulations relating to Students who commenced their Medical Studies in or before January, 1839.

BACHELOR OF MEDICINE.

Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the first examination for the degree of bachelor of medicine on producing certificates to the following effect:—

1. of having been engaged during two years in their professional studies; 2. Of having attended a course of lectures on each of four of the subjects comprehended in the list; 3. Of having dissected during nine months; 4. Of having attended to practical pharmacy during a sufficient

(a) At present, all candidates for the degree of Doctor of Medicine must have previously obtained the degree of Bachelor of Medicine in this University.

(a) The degrees in arts of all Universities in the United Kingdom are recognised by the senate for this purpose.

length of time to enable them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the second examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—

1. Of having been engaged during four years in their professional studies; 2. Of having passed the first examination: 3. Of having attended a course of lectures on each of two of the subjects comprehended in the list; 4., Of having dissected during twelve months; 5. Of having attended to practical pharmacy during a sufficient length of time to enable the pupil to acquire a practical knowledge in the preparation of medicines; 6. Of having conducted at least six labours; 7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months; 8. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months; 9. Of having completed the twenty-second year of their age; 10. Of moral character from a teacher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended.

Candidates who have not taken a degree in arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

Regulations relating to Practitioners in Medicine or Surgery desirous of obtaining Degrees in Medicine.

BACHELOR OF MEDICINE.

Candidates shall be admitted to the two examinations for the Degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been admitted, prior to the year 1840, members of one of the legally-constituted bodies in the United Kingdom for licensing practitioners in medicine or surgery; or of having served, previously to 1840, as surgeons or assistant-surgeons in Her Majesty's army, ordnance, or navy, or in the service of the Honourable East India Company. 2. Of having received a part of their education at a recognised institution or school, as required by the Charter of the University. 3. Of moral character, signed by two persons of respectability. Candidates who have not taken a degree in arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

DOCTOR OF MEDICINE.

Candidates who have been engaged during five years in the practice of their profession shall be admitted to the examination for this degree on producing Certificates to the following effect:—1. Of having been engaged during five years in the practice of their profession. 2. Of having taken the Degree of Bachelor of Medicine in this University. Candidates who have not taken a degree in arts, or passed the matriculation examination in this university, will be required to translate a portion of Celsus *de Re Medicâ*.

COLLEGE OF SURGEONS.

The following are the Hospitals and Schools of Surgery and Medicine within the United Kingdom, and in foreign Countries, from which certificates of the professional education of candidates for the Fellowship will be received by this College.

Hospitals in England.

London.—St. Bartholomew's.—St. Thomas's.—Westminster.—Guy's.—St. George's.—London.—Middlesex.—University College.—Charing-cross.—King's College.

Provincial.—Bath United Hospital.—Bedford General Infirmary.—Birmingham General Infirmary.—Queen's Hospital, Birmingham.—Bristol Infirmary.—Addenbrook's Hospital, Cambridge.—Derbyshire General Infirmary.—Devon and Exeter Hospital.—Gloucester Infirmary.—Hull Infirmary.—Kent and Canterbury Hospital.—Leeds General Infirmary.—Leicester Infirmary.—Liverpool Infirmary.—Liverpool Northern Hospital.—Manchester Royal Infirmary.—Newcastle-upon-Tyne Infirmary.—Norfolk and Norwich Hospital—Northampton General Infirmary.—Nottingham General Hospital.—Radcliffe Infirmary, Oxford.—Salisbury General Infirmary.—Salop Infirmary.—Sheffield General Infirmary.—Stafford County General Infirmary.—Sussex County Hospital.—Winchester County Hospital.—Worcester Infirmary.—York County Hospital.

Hospitals in Ireland.

Dublin.—Richmond.—Doctor Steevens's.—City of Dublin.—Mercers'.—Meath.—Jervis-street.—St. Vincent's.

Provincial.—Belfast Hospital.—North and South Infirmaries, Cork.—Limerick County Infirmary.

Hospitals in Scotland.

Edinburgh.—Edinburgh Royal Infirmary.

Provincial.—Glasgow Royal Infirmary.—Aberdeen Royal Infirmary.

Schools in England.

London.—St. Bartholomew's.—St. Thomas's.—Guy's.—St. George's.—London.—Middlesex.—University College. King'sCollege.—Westminster.—Charing-cross.—Grosvenor-place.—Kinnerton-street.—Hunterian.

Provincial.—Royal School of Medicine and Surgery, Birmingham.—Old Park Medical School, Bristol.—Hull and East Riding School of Medicine.—Leeds School of Medicine.—Liverpool Infirmary School of Medicine.—Royal School of Medicine and Surgery, Manchester.—Newcastle-upon-Tyne School of Medicine and Surgery.—Sheffield Medical Institution.—York School of Medicine.

Schools in Ireland.

Dublin.—Royal College of Surgeons.—Trinity College.—Apothecaries' Hall.—Richmond.—Dublin School of Medicine.—Original School of Medicine, Peter-street.—Park-street School of Medicine.

Provincial.—The Queen's Colleges of Belfast and Cork.—Belfast Royal Institution.—South Mall School of Medicine, Cork.

The several schools recognised by the Royal College of Surgeons of Ireland.

Schools in Scotland.

Edinburgh.—University.

Provincial.—University, Glasgow.—King's College, Aberdeen.—Marischal College and University, Aberdeen.

The several schools recognised by the Royal College of Surgeons of Edinburgh.

In the British Colonies and in Foreign Countries.

The several hospitals and schools in the following cities, viz.:—Calcutta.—Paris.—Montpellier.—Strasburg.—Berlin. Vienna.—Heidelberg.—Bonn.—Göttingen.—Leyden.—Liège.—Pavia.—New York.—Philadelphia.

The president and council have great pleasure in announcing that (at the instance of the Director-General of the Medical Department of the Army, the Physician-General of the Royal Navy, and the Chairman of the Honourable East India Company) the General commanding the Army in Chief, the Lords Commissioners of the Admiralty, and the Court of Directors, have, with the view of promoting the objects of the college, been pleased to place at the disposal of the president and council an assistant-surgeoncy in each service, once in three years, for such of the said students as may be considered worthy of these honourable distinctions.

Museum.—The museum is open to the members of the college, to the trustees of the Hunterian Collection, and to visitors introduced by them personally or by written orders stating their names (which orders are not transferable), on the public days, which are Mondays, Tuesdays, Wednesdays, and Thursdays, from twelve to four o'clock; except during the month of September, when the museum is closed. The museum is also open on the above days to all fellows and licentiates of the Royal College of Physicians in London; to peers and members of Parliament; to the great officers of state and of the royal household and their immediate deputies; to all the dignitaries of the Church and of the law; to all general and flag officers; to the members of all the learned and scientific bodies in the United Kingdom; to the members of all the government boards, and to others introduced personally by them respectively. It is also open to all learned and scientific foreigners and to the articled students of the college.

Microscopic demonstrations are given, in the theatre of the college, by the assistant conservator, every Wednesday, from the beginning of October until the commencement of the annual course of lectures.

Library.—The library is open daily, Sundays excepted, to members and articled students of the college, from twelve until six o'clock. Members have the privilege of personally introducing a visitor. Persons, not members, desirous of admission, must make application in writing to the president or library committee, specifying their christian and surnames, rank or profession, and residence. Tickets of ad-

mission, which are not transferable, are granted for six months, at the expiration of which time application must be made for their renewal.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

1. The Faculty of Physicians and Surgeons of Glasgow, having recently obtained from the Legislature the confirmation and better definition of their privileges, have carefully revised their regulations respecting the granting of licences, and have made certain alterations therein. They have accordingly enacted the following laws, to be observed by all applicants for their licence from and after this date.

2. *Preliminary Instruction.*—Every candidate for the diploma of this Faculty must either, previously to or during his medical education, have received regular instruction in the elements of mathematics; and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures. He must also have been well instructed in the Latin language.

3. *Professional Instruction.*—The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each :—

1. Anatomy, two courses of six months. 2. Practical Anatomy, two courses of six months. 3. Surgery, two courses of six months; or, Surgery, one course of six months; and Military Surgery, one course of six months. 4. Chemistry, one course of six months. 5. Practical Chemistry, one course of three months. 6. Theory or Institutes of Medicine, one course of six months. 7. Practice of Medicine, one course of six months. 8. Materia Medica, one course of six months. 9. Midwifery and Diseases of Women and Children, one course of six months. 10. Clinical Medicine, (a) two courses of three months. 11. Clinical Surgery, (a) two courses of three months. 12. Medical Jurisprudence and Police, one course of six months. 13. Botany, one course of three months. 14. General Hospital, with at least eighty beds, twenty-one months. 15. Practical Pharmacy at the laboratory of a surgeon or apothecary, or of a public hospital or dispensary, or at that of a chemist or druggist recognised by the faculty, six months.

4. Medical students, who had commenced their education prior to 7th June, 1840, are exempted from the necessity of producing evidence of attendance on practical anatomy, and clinical medicine and surgery; prior to 4th April, 1831, on medical jurisprudence; and prior to 8th November, 1831, on practical chemistry; also, prior to 3rd February, 1834, on botany, and on more than twelve months of a public hospital; also prior to 1st May, 1850, on more than eighteen months of a public hospital, or six months of practical anatomy; at which latter date, also, the alternative was permitted of an attendance of twenty-one months on a general hospital, or of eighteen months on such hospital, with a three months' course of lectures on the eye, and attendance for six months on an eye-hospital.

5. Besides attendance on all these branches, which is *imperative*, the Faculty *recommend* the following, viz. :—

1. Lectures on the Eye, and Hospital for Eye-Diseases.—A three months' course of Lectures on the Eye, with six months' attendance on an Eye-Hospital, containing at least twelve beds for operation-cases, will be considered equivalent to three months of a general hospital. 2. Lying-in Hospital. 3. Hospital for Syphilitic Diseases. 4. Pathological Anatomy. 5. Natural History and Comparative Anatomy. 6. Greek, French, German, and Italian.

6. Courses of six months must consist of not fewer than one hundred and ten lectures, and courses of three months of sixty lectures, with the exception of military surgery and clinical lectures. Two courses of three or four months, on any of the above subjects, will be taken as equivalent to one six months' course.(b)

7. The above lectures must have been delivered by professors, or lecturers in a university or college, instituted by public authority, or by fellows of the Royal Colleges of Physicians or Surgeons, respectively of London, Edinburgh, or Dublin, or of this faculty, in any metropolitan or provincial school, either British or foreign, where there is a general hospital of more than eighty beds, the lecturer and the school having been recognised by the faculty of the Royal colleges. (*See note at the end.*)

8. The faculty will not recognise any course of lectures by a professor or lecturer who teaches more than one of the branches included in their curriculum, or who, in addition to any one of these branches, teaches any branch, medical or general, not included in the curriculum, unless such professor or lecturer shall have obtained special leave from the faculty. The following are exceptions, however, to this regulation, viz., lectures on anatomy and practical anatomy, may be delivered by the same individual; also on chemistry and practical chemistry, or on materia medica and botany, in schools where separate professors for these branches are not appointed. Practice of medicine and clinical medicine may be taught by the same individual, and surgery and clinical surgery; also clinical medicine or clinical surgery with any one of the other branches of education prescribed in the curriculum.

9. The candidate having been supplied with a schedule of the above curriculum, having filled it up and subscribed it, and satisfied the registrar, by the exhibition of the necessary evidence, that his education has been conducted agreeably to the above regulations; also, that he is twenty-one years of age, and of good moral character, and having lodged in the hands of the registrar the sum of ten pounds, as the fee for his diploma, he shall be admitted to examination. The examination days shall be on the first and third Tuesdays of every month, but in special cases, at the discretion of the president, the candidate may be examined on another day; in which case he must, in addition to the ordinary fee, pay two guineas, which are not to be returned in case of rejection.

10. Each candidate shall be examined partly orally and partly by written question and answer, without the use of books. He shall also write, at the dictation of any of the examiners, two or more formulæ of prescription; and his knowledge of Latin shall be tested by translating a portion of a Latin author. Bones, other anatomical or surgical preparations, and specimens of materia medica, shall be used at the discretion of the examiners, for testing the knowledge of the candidate.

11. The committee of examiners being satisfied with these trials, and having reported the same to the next meeting of faculty, or to a general meeting of the examiners, which the president may call for the purpose, the candidate shall be entitled to his diploma, on taking and subscribing the declaration authorised by law, in place of extra judicial oaths.

12. The unsuccessful candidates shall be remitted to their studies for a period of not less than three months after a first rejection, and six months after a second, and their names shall be concealed. The whole of the deposited fee shall be returned to an unsuccessful candidate on his first rejection, but on every future similar occasion, two guineas shall be retained.

13. With the view of ascertaining more perfectly the fact of the Glasgow students having attended the above courses, and their diligence whilst doing so, the faculty will keep a book at their hall for registration, at stated times, of all medical students who may apply.

14. In this book, all Glasgow students who desire to possess the diploma of the faculty must register their names, and place and date of birth, in their own hand-writing, and the classes they attend. The faculty registrar shall cause to be entered in separate columns—1st, The name of each individual; 2nd, The medical classes, hospitals, and dispensaries attended by each during the current session; 3rd, The names of the teachers. The registrar shall enter only such as apply to him personally; he shall examine all the tickets produced by each individual, and shall not register any classes for which tickets are not produced. This book shall be closed for registration of the winter classes on the 30th November in each year; and of the summer classes at the end of the second week from their commencement. Sickness alone shall excuse irregularity of registration; but such excuse can only be sustained, and the registration effected at a later period, on application to, and satisfaction of, the President and his council.

(a) These not to be attended at the same time.

(b) The only exception to this rule relates to lecturers on chemistry, practical chemistry, and botany, who may be non-professional men, but must be specially recognised by the faculty.

15. At the close of each session, the students shall produce to the registrar the certificates of attendance they may have received from their respective teachers, the terms of which shall be entered in the registration-book.

16. The faculty require that every private lecturer, under pain of his certificates not being recognised by them, shall ascertain, at least twenty-five times in a six months', and twelve times in a three months' course, the actual attendance given by his pupils. That he shall do this by calling the name of each pupil at least once a week on uncertain days, marking his presence or absence in a regular roll-book. That, in granting certificates of attendance, he shall specially mention, in words at length, the number of times the roll was called, and the number of occasions on which the pupil was present.

17. When the student shall have been absent more than five times in a six months', or three times in a three months' course, he will be specially examined on the particular branch where the attendance was defective; but when his absence shall exceed eight times in a six months', or four times in a three months' course, unless accounted for to the entire satisfaction of the council of the faculty, he shall not be admitted to examination until he has attended another course of lectures on such department of study.

18. For registration, a fee of 5s. shall be paid annually by each student; but he shall be entitled, without fee, to a certified extract, at any time, from this register, attested by the signature of the registrar. Such certificates will be required from all candidates for surgical diplomas, in regard of that part of their medical education which they have received in Glasgow. Similar certificates will be required from any other schools in which registration-books are kept, relative to such portions of the course of study as the certificates may embrace, in place of the testimonials of the individual lecturers or teachers. Candidates educated at schools where no register is kept, must produce certificates from their respective professors or lecturers, both of their having entered the several classes at an early period of the course, and also of their having attended these classes with due regularity.

19. The faculty having resolved to institute an examination in Latin, on the second and following Saturdays in December, annually, without expense to the students who may choose to avail themselves of it, such students as apply and give a satisfactory exhibition of their proficiency in these branches, will have such examination entered in their registration, and shall not be again called upon to give evidence of such proficiency at any future examination. Students who have taken a Degree in Arts from a university of Great Britain or Ireland, will also be exempted from these examinations.

Note.—The licentiates of the faculty of physicians and surgeons of Glasgow are, by the late Act of Parliament in favour of that body, placed on precisely the same footing throughout the British empire as the licentiates of the Royal College of Surgeons of Edinburgh; and, consequently, as to the privilege of surgery, as the members of the Royal College of Surgeons of England.

Also by special letters, those holding the diploma of the faculty are admitted to the same privileges in respect of the Army and Navy and East India medical services as those holding the diplomas of the Royal Colleges.

APOTHECARIES' HALL OF IRELAND.

1791.

Laws Regarding the Education of Apothecaries.—Every candidate must undergo two separate examinations,—one for the certificate of apprentice; the other for the licence to practise.

Every candidate for the certificate of apprentice must have attained the age of fifteen years, and will be examined in the following books:—The works of Sallust; the first six books of the Æneid of Virgil; the Satires and Epistles of Horace; the Greek Testament; the Dialogues of Lucian; the first four books of Homer's Iliad; the first six books of Telemachus, or the History of Charles the Twelfth (in French); the first two books of Euclid; and algebra—to simple equations.

Every candidate for the licence to practise as an apothecary must lay before the Court the following documents:—1. The certificate of apprentice. 2. The indenture of apprenticeship, enrolled according to the Act of Parliament, bearing the certificate of the licentiate apothecary, to whom he has been indentured. 3. Certificates that he has attended at least one course of lectures on each of the following subjects delivered at the school of Apothecaries' Hall, or at some other school of medicine recognised by the Court:—Chemistry, anatomy, and physiology, six months; practical chemistry and botany, three months; materia medica, demonstrations, and dissections, theory and practice of physic, surgery, midwifery, and the diseases of women and children, six months; medical jurisprudence, three months.

A certificate of twelve months' attendance on the entire practice of a medico-chirurgical hospital, recognised by the Court, containing not less than fifty beds, and where clinical instruction is regularly given.

Also a certificate of having assisted in at least thirty cases of midwifery practice, twenty of which must be attended in a recognised hospital.

The examination for the licence to practise as an apothecary will be as follows:—In translating and explaining the process of the British Pharmacopœias and extemporaneous prescriptions; in chemistry and general physics; in materia medica and therapeutics; in natural history and medical botany; in anatomy and physiology; in the theory and practice of medicine; in midwifery; in medical jurisprudence.

COUNTY OF LIMERICK INFIRMARY.

This hospital, now the largest County Infirmary in Ireland, contains 120 beds. It is visited regularly by one or more of the medical and surgical officers, and the nature, treatment, and progress of each case explained at the bedside of every patient.

Being the only general infirmary in a very populous county, numerous cases of accidents and injuries of all kinds are admitted weekly, affording pupils every possible means of becoming familiar with all the most important operations in surgery.

There is also a numerous attendance of extern patients daily, affording abundant opportunities for the study of dispensary practice, and for the performance of the minor operations of surgery.

Practical pharmacy and the composition of medicine, if the pupil requires a knowledge of them, may be studied with advantage under the apothecary.

Certificates of attendance on this hospital will be received by the Colleges of Dublin and London, the Universities of Edinburgh and Glasgow, the Army and Navy Board, the Apothecaries' Company of London, and Apothecaries' Hall, Ireland.

Fee for six months, five guineas; twelve months, ten guineas; three years, twenty-five guineas; practical pharmacy and composition of medicine one year, three guineas.

Medical attendants.—Physicians, Amos Vereker, M.D.; Daniel Griffin, M.D., M.R.C.S.E. Assistant-physician, John Russell, M.D. Surgeons, J. T. Wilkinson, M.D., F.R.C.S.I.; J. Wilkinson, M.D., L.R.C.S.I. Assistant-surgeon, Robert R. Gilston, M.D., L.R.C.S.I.

By an arrangement among the medical officers, of which the colleges are apprised, it is regulated, that every certificate of attendance on the practice of this hospital, shall be signed by two of the physicians and two of the surgeons. As the names of all pupils entered up to the 1st of May and 1st of November, are regularly transmitted to the Royal College of Surgeons, London, without which their certificates will not be allowed, such gentlemen as are desirous of attending the hospital are requested to enter previous to either of those periods.

ORDNANCE MEDICAL DEPARTMENT.

63, PALL-MALL.

Regulations for the Admission of Candidates.—Provisional List.—Medical students who have completed their twentieth year, who have been well instructed in the Latin and Greek languages, the elements of mathematics and natural philosophy, and who can produce satisfactory proofs of being of good moral character, and diligent in the study of their profession and the sciences connected with it, may be entered in the provisional list of gentlemen desirous to be admitted candidates for employment in the Ordnance Medical Department. A knowledge also of modern languages, though not indispensable at the time of provisional reception, is highly desirable, and will be duly appreciated.

Candidates.—No applicant is to be received on the list of

candidates before he is twenty-two, or retained on it after he is twenty-five years of age. The age of every individual must be verified by a certificate of his baptism, if it can be procured. He must be also unmarried, and in the full enjoyment of health, both bodily and mental.

Qualifications.—Every candidate must produce a diploma from one of the Colleges of Surgeons of London, Edinburgh, or Dublin; and a certificate of qualification from the Society of Apothecaries in London. He must also bring proof of having diligently gone through the following branches of professional education, nearly all of which are required to enable him to take out the above-mentioned diploma and certificate—viz., of having served an apprenticeship of five years to a surgeon and an apothecary, if educated in England; but if not, qualification in the practice of medicine and pharmacy equivalent thereto; of having attended the practice of surgery in a recognised hospital or hospitals, where clinical instruction is constantly given, for three years, three months being allowed for a vacation in each year; of having attended the under-mentioned lectures, &c.:—

Anatomical lectures . . .	Three anatomical seasons or sessions.
Ditto—demonstrations . . .	
Ditto—dissections . . .	
Morbid anatomy and pathology .	One course.
Lectures on the principles and practice of surgery, delivered in two distinct periods or sessions	Two courses, each comprising seventy lectures, or one course of surgery, and one of military surgery.
Natural history, or comparative anatomy	One course.
Chemistry	One course of a hundred lectures.
Botany	One course.
Materia medica and therapeutics .	One course of a hundred lectures.
Lectures on the principles and practice of medicine . . .	Two courses, each one hundred lectures; second and third winters.

Medical practice, with clinical lectures, eighteen months, commencing the second session, viz., twelve months in a recognised hospital, and the remaining six months either in a recognised hospital or a dispensary.

Medical jurisprudence with toxicology	One course of fifty lectures.
Midwifery	Two courses, each of thirty lectures; second and third sessions.
Practical midwifery (not less than thirty cases)	After the conclusion of the first course of midwifery lectures, a certificate of having passed the usual examination is to be produced.
Diseases of the eye . .	With attendance on patients of that class. One course.

He must produce a diploma from either of the colleges in London, Edinburgh, or Dublin, and, if not a graduated M.D. of Scotland or Ireland, after having actually passed an examination in the University where he has obtained his degree, a certificate of qualification also from the Society of Apothecaries in London. It is likewise expected that candidates shall have attended establishments for the cure of diseases of the ear and skin, and for the treatment of patients affected with mental derangement. Certificates will not be received on more than two branches of science from one and the same lecturer; but anatomy and physiology, demonstrations and dissection, materia medica and botany, will be respectively considered one branch of science. In the certificates of attendance on hospital practice and on lectures, the dates of commencement and termination are to be inserted in words at full length. The moral conduct and character of each individual must be certified by the gentlemen to whose care his education was confided; and also by a clergyman, who, if practicable, should be the incumbent or officiating minister of the parish in which the applicant usually resides. The documents above detailed are to be inspected by a Board, to consist of not less than five medical officers, after which they are to examine the candidates as to his professional acquirements. If his education has been chiefly medical, the examination will be principally in practical surgery; but, if surgical, in the theory and practice of physic, including pharmacy. The full qualification being required on admission, a second examination is deemed unnecessary.

SHEFFIELD MEDICAL INSTITUTION.

Winter Session, 1850-51.—The Introductory Address will be delivered by Dr. I. C. Hall, on Tuesday, October 1, at six p.m.—General and Morbid Anatomy and Physiology and Descriptive and Surgical Anatomy—one course, 6*l.* 6s.; perpetual, 10*l.* 10s. Practical Anatomy and Demonstrations—one course, 4*l.* 4s.; perpetual, 6*l.* 6s. Principles and Practice of Medicine—one course, 5*l.* 5s.; perpetual, 8*l.* 8s. Clinical Medicine. Principles and Practice of Surgery—one course, 3*l.* 3s.; perpetual, 6*l.* 6s. Clinical Surgery. Chemistry—one course, 5*l.* 5s.; perpetual, 8*l.* 8d. Practical Chemistry.

Summer Session, 1851.—Midwifery and the Diseases of Women and Children—one course, 3*l.* 3s.; perpetual, 6*l.* 6s. Materia Medica and Therapeutics—one course, 4*l.* 4s.; perpetual, 6*l.* 6s. Medical Jurisprudence—one course, 2*l.* 12s. 6d.; perpetual, 5*l.* 5s. Botany—one course, 2*l.* 12s. 6d.; perpetual, 5*l.* 5s.

A resident medical tutor will assist the pupils in the dissecting-room (in addition to the demonstrators) daily.

Perpetual fee for all the lectures required by the London University, the Royal College of Surgeons, and the Apothecaries' Company, 42*l.*

A prospectus, and any additional information, may be obtained on application to Dr. Elam, Honorary Secretary, Surrey-street, Sheffield.

SHEFFIELD GENERAL INFIRMARY.

Physicians—Dr. Thompson, Dr. Branson, Dr. De Bartolemé. Surgeons—Wilson Overend, Esq., F.R.C.S.; Henry Jackson, Esq., F.R.C.S.; Samuel Gregory, Esq., F.R.C.S.; House-Surgeon, Mr. Law.

Fee for medical practice—one year, 10*l.* 10s.; perpetual, 15*l.* 15s. Fee for surgical practice—one year, 10*l.* 10s.; perpetual, 21*l.*

Upwards of 4000 patients are annually attended at this hospital.

Perpetual fee for all the courses, 42*l.*

In place of what appeared in our last (through want of explicit information) we refer our readers to the following

SCALE OF FEES OF THE BRISTOL INFIRMARY.

ATTENDANCE ON MEDICAL PRACTICE.

One year	£15 0 0
One year and a-half	20 0 0
Half a year	8 0 0

ATTENDANCE ON THE SURGICAL PRACTICE.

Dressing Students.

One year	£35 0 0
Second year	30 0 0
Third year	25 0 0
Three years at one entry . . .	80 0 0

Walking Students.

One year	20 0 0
Second year	12 10 0
Third year	7 10 0
Three years at one entry . . .	35 0 0

THE MEDICAL TIMES.

SATURDAY, OCTOBER 5.

THE INTRODUCTORY LECTURES.

A most striking and, to us, most gratifying proof of the desire of our friends to assist us in raising to the highest point the literary and scientific character of the *Medical Times*, has this week been afforded us, in the numerous introductory lectures and addresses which have been sent to us for publication. We have no hesitation in stating that, as far as we know, the eminent individuals who have thus favoured us have been actuated in so doing by the conviction, that the principles and rules of conduct of this journal are worthy of the noble profession of which it is one of the organs, and are deserving of the support of all the members of our common calling. It has not been our usual

custom to publish more than one or two introductory addresses; but, on the present occasion, we feel that we must abandon our ordinary rule, and avail ourselves of the valuable aid which our friends have given us. We publish this week, in the order in which we have received the MSS. from the authors, the addresses of Mr. Bransby Cooper, at Guy's Hospital; Sir Benjamin Brodie and Mr. Johnson, at St. George's Hospital; and Dr. Lankester, at the St. George's School of Medicine. In our next Number, those of Dr. George Gregory, at St. Thomas's Hospital; Mr. Benjamin Phillips, at the Westminster Hospital; and, Dr. Aldis, at the Hunterian School of Medicine, will appear; and be followed by those of Dr. Goodfellow, at the Middlesex Hospital; Dr. Hector Gavin, at the Charing-Cross Hospital; Mr. Ward, at the London Hospital; and Professor E. Forbes, at King's College.

In expressing our gratitude to these, our distinguished contributors, we cannot but again assure them, that their confidence shall not be misplaced, and that the consciousness of their approval of our exertions shall be an additional motive for our continuing to conduct the *Medical Times* according to those rules of honourable and just criticism which have received so flattering an approval.

THE MEDICAL PROTECTION SOCIETY.

The affairs of this Society demand from us some remark. The history of our profession does not exhibit another instance of credulity on one side, and mismanagement on the other, parallel to that disclosed to us in the proceedings of the Medical Protection Society. The commercial spirit is creeping into our Profession, and whether as patrons, speculators, or dupes, we are determined to league ourselves with transactions which, by education and habit, we are wholly disqualified from conducting to a successful issue. The high-spirited contempt for money, and the daily exercise of the noble prerogative of charity in our dealings with our suffering brethren, which distinguish us as a profession, incapacitate us for a rigorous attention to the detail of figures, and a minute scrutiny of pecuniary contracts and engagements. Such a discipline presupposes a hard and selfish disposition. Trustful and candid, we are liable to become the dupes of every impudent adventurer, who will only promise a miracle, and guarantee an impossibility.

It appears that the Medical Protection Society has been in existence rather more than two years,—that it has enrolled about 1,200 members, has collected for them about 15,000*l.* worth of debts, and is now in a state of bankruptcy, with a deficiency in its accounts of about 2,000*l.* due to its members. This is the statement of the management:—but we do not pretend to vouch for its accuracy. It does not appear that there has been any account taken that can be considered worthy of confidence; and, although the members have made an attempt to procure an accurate balance-sheet, that attempt has been withstood, and the probability therefore is, that the examination would lead to disclosures that would be by no means agreeable to many parties implicated in the transactions of the office. The balance-sheet, however, must come; for the profession have a right to know how their money, entrusted in confidence to the manager, and which should have been inviolable, has been expended, and who the parties are that have reaped the advantages of its illegal use. Two thousand pounds in two years is a large sum to abstract from the pockets of the profession; and we cannot conceive that the creditors will allow the manager to shuffle off his responsibility without having, at any rate, the satisfaction of knowing how every shilling has been squandered, and the names of the individuals, moreover, to whom the several amounts are due.

We understand that Mr. Beckett, the solicitor, and *brother-in-law* of Mr. Breary, the manager, has a lien upon the office to the amount of 375*l.*, and Mr. Green, a *clerk*, to the amount of 200*l.*! We have no doubt that these transactions were of an honourable character, and would not suffer by a little sifting in a legal winnow. At the meeting that was held at the Freemasons' Tavern, Mr. Ross charged Mr. Beckett with negotiating to sell his mortgage to the *Medical and Surgical Practitioners' Society*, and that gentleman denied the allegation before 300 witnesses. The Solicitor of the *Medical and Surgical Practitioners' Society* was, however, at hand to substantiate the accusation, which anon Mr. Beckett proceeded to admit, but was interrupted by the tumultuous and indignant reprobation of the meeting. It appears that Mr. Beckett, unable to dispose of his mortgage,—which, if he could have done, would have had the effect of leaving the members to settle accounts with Mr. Breary,—is now co-operating with a Provisional Committee, with a view to re-establish the Society upon another basis, but with the liability upon it of Mr. Breary's debts, which must of course be liquidated by surcharging the commissions of the members. If the profession are simpletons enough to consent to be duped a second time, we shall have lost all confidence in their good sense and discernment. The attempt to reconstitute the Society, and to inveigle members, before the accounts are revised and the liabilities declared, savours to us of gross presumption, and deserves the strongest censure.

MEDICAL PROTECTION OFFICE.

A meeting of the members of the Medical Protection Office, 43, Lincoln's-inn-fields, in pursuance of notice sent by Mr. Breary, the manager and proprietor, and Mr. Beckett, the solicitor, was held at the Freemasons' Tavern, on Friday, the 20th instant, at 8 o'clock. There were present upwards of 400 gentlemen. At five minutes past eight o'clock, J. W. Jones, Esq., one of the members, was voted to the chair.

It was then moved and carried, that Mr. Collette, the solicitor to several creditors, should be admitted, on the ground, that, as the solicitors of Mr. Breary were present, it was but just that the solicitor of his creditors should be admitted.

A discussion arose as to the admission of the press generally, or whether the medical press alone should be represented.

Mr. Propert suggested that the medical press only should be represented; indeed he would wish that no reporter at all were present, as it was inexpedient to disclose the secrets and weaknesses of the profession.

A member protested that they in the body of the hall had no secrets, and that this should not be a hole-and-corner meeting. What had they, the subscribers, done that they were ashamed of?

After some irregular conversation, Mr. Propert moved that Mr. Breary should read his report.

Mr. Breary read his report, wherein he detailed the transactions of the office from the commencement, commented upon the rapid accession of members, the favourable reception by the profession, the voluminous accounts, and the complicated nature of the business of the office, and urged that such machinery could not be worked without very considerable outlay, and that though he was deficient in his accounts to the amount of about 1800*l.*, the expenses of an infant society should not be charged on the first two years, but should be allowed to spread over a longer period in order to give him an opportunity of retrieving his position. He stated that his ruin had been brought about by some individual whose name he did not mention, who had gone about among the members in order to destroy their confidence in the office. He proceeded by suggesting, that by an increased charge for membership, and rates of commissions, and the future business to be carried on on principles calculated to give confidence in the minds of the profession, he would be enabled to make up the deficiencies, and discharge the claims of the members, and concluded with a pathetic appeal that the meeting would take his case into their kind consideration, and

to restore to him their confidence, which he had once enjoyed. (Cries of "Hear, hear," "Humbug," and confusion.)

The Accountant then read a statement of accounts, which showed a defalcation of 1800*l.*, with a balance of cash of 92*l.* in favour of Mr. Breary.

The report was not adopted.

A question was then put, whether the 92*l.* was cash in hand; when it was replied by the accountant in the affirmative, and that the greater part was in the cash-box.

Mr. Houseley then moved:—

"That, as the Report just read was most unsatisfactory, the meeting be adjourned until more explicit accounts could be produced."

This motion having been seconded,

Mr. Ross suggested, that if a balance-sheet of the accounts were to be drawn up by the same parties who had drawn up the rejected one, the proposed adjournment would be perfectly useless, as no accounts that they could render would be received with confidence. (Cries of "Hear, hear.") He, therefore, moved as an amendment:—

"That a committee of inquiry be appointed to investigate the accounts of the office, and to draw up a balance-sheet; and that the committee be empowered to appoint an accountant for that purpose."

Mr. Mack seconded the amendment; and inquired whether the accounts had been audited by any of the members; which was answered in the negative.

Some severe strictures were passed upon Mr. Breary's management and defalcations by several gentlemen. From what was elicited, the report appeared to disclose a very partial and imperfect statement of the affairs of the office.

Mr. Lord stated, that the proposal of Mr. Ross was the course he himself was prepared to recommend, as he held in his hand a resolution to that effect.

A list of names, for the committee of investigation, was then handed in; which was objected to by a gentleman, who insisted that the committee should be selected from the meeting indiscriminately, and not according to any preconcerted arrangement by the friends of Mr. Breary; when, after a desultory conversation, it was agreed that the names should be handed up to the Chairman, and submitted *seriatim* to the meeting. Mr. Clifton (as we understood) was first proposed, and elected. Mr. Propert was next proposed, and negatived, on the ground of his being identified with the "Medical Protection Office" and Mr. Breary. Mr. Ross was elected. Mr. Mack was proposed, when his name was objected to by Mr. Clifton, as he was associated with the "Medical and Surgical Practitioners' Society;" and as Mr. Propert had been rejected, it was only fair that persons connected with a rival institution should not take part in the investigation; adding some strictures on the last-named society, which was endeavouring to build its success on the wreck of the Medical Protection Office.

Mr. Ross, in an animated speech, protested that the observations of the last speaker were wholly irrelevant; and he considered that his or Mr. Mack's connexion with any other establishment, was not disqualification to serve on the committee of investigation; that he was a member—an injured member—of the "Medical Protection Office," and as such he and his colleague had been elected. He regretted that Mr. Propert had been rejected; and, after passing a high eulogium on that gentleman, he proposed that his name be again submitted.

Mr. Propert declined the honour.

Several other names were then submitted; and, after much dispute, the proposed number of twenty-one was completed.

During the course of the above proceedings, Mr. Houseley called the Chairman's attention to an important fact, namely, that there was a man in possession of the premises and the books, &c., of the office, for an assignment made by Mr. Breary of the effects of the office to Mr. Beckett, the solicitor, (who had joined Mr. Breary in calling the meeting,) and inquired what guarantee under such circumstances there was, that the books and documents of the office would be handed over to the Committee. It was then elicited, after various cross-questionings, that Mr. Beckett had placed a man in possession by virtue of a mortgage of the books, accounts, subscriptions, commissions, &c., for 375*l.* advanced to Mr. Breary on his private account. But he pledged himself to allow the Committee free access to the books. This, however, did not appear by any means satisfactory to the meeting who required the actual custody of the books by the Committee.

At this stage of the proceedings, Mr. Ross proposed, as the committee of investigation must incur considerable expense in the discharge of its duties,—"That the sum of 92*l.* balance of cash, should be forthwith handed over to the Committee to defray such expenses." Some demur being made, most searching questions were put to the cashier by the meeting, from which it transpired that the cash in question was not actually in hand, but was due from certain agents in the country, and that there were probably other claimants on the funds. Being accused of misstatement of facts, the cashier denied, that he had ever stated that the bulk of this money was in the cash-box; but, the Chairman being appealed to, decided it was his impression, that such a statement had been made; it appeared that there were only 2*l.* or 3*l.* in hand. On this discovery, some of the committee of investigation, withdrew their names, on the ground that they had been deceived by a false balance-sheet, and that it was unfair to expect them to devote their time and attention to the scrutiny of the accounts, and in addition, to incur expense and personal responsibility. The Chairman commented, in severe terms, on the assurance manifested by Mr. Breary, in submitting to the meeting a false account, and thus misleading them. A stormy and irregular discussion then ensued, as to what course should be pursued. Several members of the proposed Committee wishing to proceed to business at once; while others objected, that they had no materials, and no money appeared forthcoming; while others again suggested, that proceedings should be taken against Mr. Breary for embezzlement.

Mr. Lord, in this stage of the proceedings, rose and said, that as the committee of investigation appeared to have declined the duty imposed on them,—(cries of "No, No!")—he would now make the proposal which he had previously prepared, and which he would have made earlier in the evening, had not the proceedings taken so unexpected a turn. He then developed the outline of a scheme for the formation of a committee with power to carry on the business of the Medical Protection Office, and to discharge the past debts out of the future profits and subscriptions of the newly-constituted body, and urged, that by adopting such a plan, by practising economy, and imparting a greater activity and energy in their future proceedings, the several claims on the office might be discharged.

Mr. Ross objected to the proposal, and designated it as a mere chimera. They had already lost too much of their money, and with it all confidence in those under whose patronage or mismanagement their affairs had been conducted. What confidence could they have in the future management by Mr. Breary? They were asked to pay their guineas, and that these and the future profits of the office should go to the payment of Mr. Breary's private debts and defalcations, to reimburse his reckless expenditure on his own private account and extravagance, including a private debt due to his cousin Mr. Beckett, the solicitor. Mr. Beckett had offered his guarantee. What did he propose to guarantee? It was to be observed, that, in reference to Mr. Beckett's circular, he proposed to guarantee, not the *past* obligations of the office, but only the payment of monies received *since* the 16th instant. (Here the speaker was interrupted by several members from the body of the hall clamorously expressing their want of confidence in all the officers of the Medical Protection Office, and declared their intention to withdraw their accounts.) Mr. Ross proceeded to expose the fraud that had been attempted to be practised on them. Recurring to the mortgage, he stated that Mr. Beckett, through his agent, had, irrespective of the past debts and claims on the office, offered for sale that mortgage which he represented would transfer, not only all the books, &c., of the office, but also the subscriptions, debts, good will, &c., to the Medical and Surgical Practitioner's Society. (Uproar.)

Mr. Beckett denied that any such offer had been made.

Here Mr. Collette, a solicitor, came forward and stated, that he would not have spoken at this meeting had not Mr. Beckett thought proper so positively to deny a fact stated to the meeting by Mr. Ross; he felt it his duty to corroborate the truth of that statement. Mr. Collette then detailed the negotiations which had been referred to, whereby it appeared that Mr. Beckett's agents, or solicitors, had offered to the Medical and Surgical Practitioners' Society possession of the books, &c., of the Medical Protection Office, including about 500 guinea subscriptions, represented to be due, and about 20,000*l.* worth of debts on the books to be collected, for 375*l.*, the payment to be secured. Mr. Collette objected to make such an offer. As the Council of that Society which he represented were merely a representative body, the negotiations might be rejected by the members, but as a transfer of the business of that Society would be an advantage to all parties concerned, he proposed to submit to the Council, that Mr. Beckett's claim be paid out of the commissions alone. The proposal was submitted, on Friday last, to the Council of the Medical and Surgical Practitioners' Society, who indignantly rejected it; and it appeared, that these negotiations were proceeding at the time Mr. Breary and Mr. Beckett were treating with highly respectable practitioners who had pro-

posed to form a committee to carry on the business of the office and pay the defalcations.

Mr. Beckett admitted that he had given some instructions to such an effect, but was compelled to sit down amidst groans and hisses from the meeting.

After some violent and indignant language against the office and its proceedings, and the manner in which they had been duped, the meeting separated in great confusion, it being first moved and seconded, that a vote of thanks of the meeting are due to the Chairman.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Assurance Magazine. No. I. London: W. J. D. Pateman, *Post Magazine* Office, Wine-office-court, Fleet-street.

The science of life assurance is so closely allied to that of medicine, and so capable of throwing light upon the phenomena of disease in its various forms, that we hail with pleasure the appearance of a new magazine devoted to this subject. The statistics of life assurance are, in fact, the statistics of disease. A knowledge of the mortality of the maladies peculiar to different climates and regions is as necessary to the actuary as to the physician: and the former, in his sphere of analysis and computation, is capable of lending valuable aid to the labourers in the extended field of medical science. Calculation is the key to many mysteries in medicine. Isolated investigations and private opinions are useful only as they are corrected, strengthened, or certified, by the collateral testimony of past or concurrent inquirers. Even truth requires an evidence.

This new magazine contains many elaborate and able articles. The first is a "Computation of Life Contingencies," by Frederick Hendriks, Esq., and exhibits considerable mathematical talent. It is succeeded by another on "Annuities and Assurances," by Samuel Brown, Esq., of equal merit. The most interesting article, in a medical point of view, is one collated from the *Bombay Times*, on the mortality amongst Europeans in the Bombay army for eight years, from 1841 to 1848 inclusive. We subjoin a Table illustrative of the mortality by the several diseases prevalent in the Indian army.

Total Deaths in Eight Years, with Proportions Dying by Different Diseases.

	Deaths.	Proportion per cent. of Strength.
Cholera	1163	1·69
Diarrhœa and Dysentery ..	1461	2·13
Delirium Tremens	69	·10
Fevers	960	1·40
Hepatic Diseases	326	·47
Inflammations	71	·10
Wounds	79	·11
Other Diseases	597	·87
Total	4726	6·87
Total strength in Eight Years ..	68737	

The magazine is got up in most creditable style, and will compete worthily with the highest class of periodical literature. The talent displayed in its various articles, and the general usefulness and importance of its objects, ought to secure for it liberal support.

Medico-Chirurgical Transactions. Published by the Royal Medical and Chirurgical Society of London. Second Series. Vol. XV. 1850. Pp. 360.

We have to express our thanks to, we presume, the Secretaries of the Medico-Chirurgical Society, for so early an opportunity of perusing the forthcoming volume of the "Transactions." We thank them the more, because this privilege on the present occasion is a great one. It is a long time since we have read any of the Society's volumes which have been so richly studded with valuable and important papers. As long as such volumes are published as the one before us, we have no fear for the stability and usefulness of this Society, which has been well termed the House of Representatives of the medical profession.

The various papers in this volume have already appeared in abstract in our pages; but some of them are so extremely important, that we shall probably analyze them again for the benefit of those among our readers who may not be possessors of the volume of the "Transactions." We can now, however, merely pass them in review. The first paper is one by Mr. Forbes on a Foreign Body in the Right Bronchus, and contains an able exposition of the signs of this condition, and of the reasons for and against an operation. A short paper by Mr. De Morgan, on the Propriety of Subcutaneous Section of the Tendo Achilles in some Cases of Fracture of the Bones of the Leg, is followed by a most philosophical paper by Dr. Jenner on the Non-identity of the Causes of Typhus, Typhoid, and Relapsing Fevers. This paper is a supplement to those now in course of publication in our own pages, and completes the chain of argument which has apparently at last solved this difficult and much-contested problem. The next two are papers by Mr. Field, on a Case of Intestinal Obstruction, in which an operation was performed with success, the patient having lived twenty-one months subsequently: and by Mr. Clarkson on a somewhat similar case. The cause of the obstruction in Mr. Field's patient was peculiar, being, as far as we can make out, a fibrinous plug, but the description is not particularly clear. In Mr. Clarkson's case the intestines were strictured by a fibrinous ring, whose origin was external to the gut. Chemical researches on the blood, and evacuations of cholera patients, and on the examination of choleraic air, by Dr. Robert Dundas Thomson, follow. There are some good observations in the paper, but there does not appear to us to be anything very novel. Dr. Thomson confirms the observations lately made, that the amount of soluble salts in choleraic blood is considerable, but he points out that, compared to the quantity of insoluble salts, it is diminished; in healthy blood, the insoluble are said to be to the soluble salts as 1 to 4·21, while in cholera they are as 1 to 3·83. We observe, that the whole organic matter of the serum is termed "albumen," no notice being taken of the important observations of Becquerel, who found the albumen diminished in quantity, but the proportion of the "extractive" matters enormous. At the end of the paper, some careful experiments on the air of cholera districts are recorded, which failed in detecting any abnormal ingredient or alteration. The author, therefore, doubts the dependence of the disease on a specific poison, but does not quite seem to have apprehended the arguments on which this hypothesis is based. An interesting case by Dr. Basham, on Stricture of the Œsophagus, follows; and this is succeeded by a paper by Dr. George Johnson, on the Condition of the Vessels in Granular Kidney. It appears that, in all cases of "chronic renal disease" examined by the author, important changes—viz., thickening, hypertrophy, and obliteration—have been detected in the inter-glandular renal arteries and Malpighian capillaries. The subject is merely opened, but the communication is valuable, and indicates that we shall have something of importance on this head from the same quarter. The next paper is, perhaps, the most important in the volume. It is by Dr. Quain, on Fatty Diseases of the Heart, and contains an elaborate exposition of one of those diseases which the science of the present day has revealed to us. We must reserve it for future analysis; but we may say, that this paper, and the one by Dr. Jenner, reflect the greatest credit on the British school of pathology. A short paper, on a Bullet lodged in the Bladder of one of the 9th Lancers, at the affair of Chillianwallah, will be perused with interest by those who are fond of surgical rarities. A case of Scrofulous Abscess in the Anterior Mediastinum, reported by Dr. Maclachlan, is very important, on account of a difficulty in diagnosing it from aneurism. A very well-detailed case of mollities ossium, by Dr. Macintyre, gives us some new information respecting this fearful disease; and it is also very valuable, as it was in the urine of this patient that the peculiar modification of albumen was detected which has been described by Dr. Bence Jones, in the "Transactions of the Royal Society" for 1848. We may take the opportunity of remarking, that it would have been well to have appended to Dr. Macintyre's paper an abstract of Dr. Bence Jones's analysis; it is often very inconvenient for a reader to have to refer to two or three separate publications for the full account of a single case; the "Medico-Chirurgical Transactions," are just as worthy of Dr. Jones's paper as the "Philosophical Transactions." There is no earthly use, but much inconvenience, in publishing half an observation in one place, and half in another. The same practice of splitting the records of a case occurs also in a subsequent paper by Dr. Bence Jones, on a case of "Albuminous and Fatty Urine." Half the examination of this case appears in the volume before us; for the other half we are referred to the "Royal Society's Transactions" for this year. We do not know how this plan of publishing half a case in one periodical, and half in another, originated; but the sooner the divorced parts are re-united the better.

"Hæmatocele of the Spermatic Cord, and of the Tunica Vaginalis," by Bowman, and one or two minor papers, on "Disarticulation of the Lower Jaw," on "Excision of the Os Calcis," and

on "A Case of Operation for Stricture of the Rectum," lead us to Dr. Robert Lee's "Counterblast against the Speculum." We have perused this paper with attention; and, without agreeing *in toto* with its author, we think it likely to be of service. The following case, with which the paper concludes, is so singular in all respects, that we transfer it entire to our pages. We do not know what to say about it; it seems scarcely credible, nor, indeed, could we believe it, did it emanate from less respectable authority:—

"Dr. Copland," writes Dr. Lee, "has communicated to me the following history of a remarkable case, in which the speculum was used in my opinion, contrary to every scientific principle, and with fatal effects:—'A lady,' says Dr. Copland, 'had been several years afflicted with jaundice, and in the latter period of these years became paraplegic. The paraplegia was to a certain extent removed, so that she was able to drive out in her carriage. She had consulted several physicians before she came to me, and I had seen her repeatedly during the last few years. She had heard that a physician had cured the wife of a distinguished person of some very serious disease of the womb. When this was related to her, and that it was done in consequence of his employing a new method of examination, and that, by having recourse to this, he had not only cured the lady referred to, but was also better able than any other physician in London to find out the source of all diseases occurring in females, she went and consulted him, and at the same time informed him that she was under my care. This lady begged me to meet this practitioner in consultation, which I did, when he informed me what this new method of examination was. He stated, that, from the previous conversation he had had with the patient, he believed that all her illness arose from disease of the uterus, and he wished to demonstrate this with the speculum. To this I answered, that there could be no disease of the uterus or its appendages, because the uterine functions had been performed regularly up to the age of 49 years, and that she had never complained of leucorrhœa or of any uneasiness about the uterus. However, he succeeded in recommending, with the concurrence of this lady's married sister, who had accompanied her from country, that an examination with the speculum should be made. I said it appeared to me wholly unnecessary, but I would leave the patient to her own discretion. The examination was commenced, and I remained some time, but was shocked with the proceedings, for the hymen was unbroken, and the doors were all obliged to be closed to prevent the people in the house from hearing her screams and being alarmed. The examination went on, and after having stopped the greater part of an hour, during which it continued, and was not completed, I left. About seven or eight days after this, I was informed that the paraplegic symtoms, which had previously been much mitigated, had become exasperated, and had extended so as to produce general paralysis, and, ultimately, delirium and coma. She died in eight days after the examination with the speculum, and I requested an examination of the body to be made. This was done in the presence of Dr. King, two surgeons from Woolwich, and myself. The operator with the speculum was also requested to attend, but he did not appear. The spine was opened, and as high as the first and second dorsal vertebræ lymph was effused between the membranes; but it was not recent, and was partially converted into a gelatinous adipose substance. But above this, and as high as the base of the brain, there were indications of recent inflammation, with a copious effusion of coagulated lymph observed. The uterus and all its appendages were perfectly healthy; the os cervix, and every part of the uterus was in a perfectly sound state, and the vagina also was perfectly health, except at its orifice, which presented appearances of recent violence. The hymen was completely torn.'"

After reading this case, who will contend that the severe remarks we formerly made on the abuse of the speculum were not warranted. Whatever may have been the effect of the examination on the spinal disease, there can be no doubt that this unnecessary proceeding in a virgin who had no signs of uterine disease, was most unjustifiable. We wish we knew the name of the operator:—we would gibbet him for the contempt of all honest practitioners.

We must hurry over the remaining papers. The first case on record of poisoning by Sir William Burnett's fluid is given by Dr. Letheby; and Mr. Paget, of Leicester, has communicated a very excellently-related and interesting case of a calculus in the bladder, which was extracted through a patent urachus by way of the umbilicus. A case of Ileus and Hernia, by Mr. Solly; Two Cases of Absence of the Thyroid Body, by Mr. Curling; Abscess in the Vesicula Seminalis, by Mr. Henry; A Minute Examination of Chylous Urine, by Dr. Bence Jones; and Observations on Prolonged Expiration as a Symptom of Incipient Phthisis, by Dr. Theophilus Thompson, form the subjects of the remaining papers.

In conclusion, we may merely say, after this enumeration, that we do not know any work which contains so many original and curious observations as this volume of the "Transactions."

The British and Foreign Medico-Chirurgical Review. No. XII. October, 1850.

The present Number of the *Medical Quarterly* is an excellent one, and equals its predecessors both in originality and in sound criticism. A very able Article on "Vegetarianism" will be perused by every one with interest, on account of its immediate practical relation to dietetic rules. A long Article on the "Diseases of the Digestive System" gives us an excellent account of the most recent German opinions on this subject; and in a "Review of Thomson on Skin Diseases" will be found much original and striking thought. Among the minor Articles we have been much struck by the one on the "Confession of Professor Webster." It is a capital specimen of acute medico-forensic reasoning. There are also some other very good Reviews in this Number, and the "Periscope" is, as usual, full of instructive selections from English and foreign publications.

MEDICAL NEWS.

Military Appointments.—1st Dragoons—Surgeon Luke Barron, M.D., from the 39th Foot, to be Surgeon, vice Bartley, who exchanges. 39th Foot—Surgeon John Metze Bartley, M.D., from the 1st Dragoons, to be Surgeon, vice Barron, who exchanges.

Naval Appointments.—Surgeon John Bower (1841), to be Surgeon-Superintendent of the Emma Eugenia, convict ship. Assistant-Surgeon, Wm. Francis (1850), to the Victory, flag-ship, at Portsmouth. Surgeon James J. Paul, M.D. (1845), to the Inaum, 72, receiving ship at Jamaica. Acting Assisting-Surgeons, James Johnstone (1849), from the Victory flag-ship at Portsmouth, to the Fox, 42, East India station. Richard Picken, M.D. (1850), from the Victory to the Fox.

Obituary.—On the 17th July, at 7, Allason-terrace, Kensington, of apoplexy, Mr. Francis Morgan Walker, surgeon, late of Chesterfield, Derbyshire. On the 13th July, Dr. Graham, R.N., on board the Honourable Company's steamer, Phlegethon, at Whampoa, aged 32. At Sydney, New South Wales, on the 20th April, Farquhar M'Crea, M.D., late of the 6th or Enniskillen Dragoon Guards. Lately at Malta, Surgeon Thompson, of the 69th Regiment. On the 18th inst., at Tiverton, Devon, Thomas Macmillan Fogo, M.D., late of the Royal Artillery. At 8, Abercromby-place, Edinburgh, on the 10th inst., John Taylor, Esq., surgeon. On the 15th April last, at Hobart Town, Van Diemen's Land, Thomas Gibson, Esq., Surgeon, R.N.

Mr. Lane, of Birmingham, has left 50*l.* to the General Hospital and the Dispensary.

MORTALITY TABLE.

Deaths in the week ending Saturday, Sept. 21, 1850.

(Metropolis.)

Causes of Death.	Sept. 21. 0	15	60	All Ages	Sum of Ten Weeks.
All Causes	392	302	163	858	10126
Specified Causes	387	302	163	853	10076
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	145	35	16	196	3511
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	...	27	13	40	506
Tubercular Diseases	63	96	3	162	1681
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	46	39	33	118	1090
Diseases of the Heart and Blood-vessels	1	18	9	28	231
Diseases of the Lungs, and of the other Organs of Respiration	38	25	25	88	797
Diseases of the Stomach, Liver, and other Organs of Digestion	16	17	11	44	703
Diseases of the Kidneys, &c.	1	8	2	11	85
Childbirth, Diseases of the Uterus, &c.	...	8	...	8	93
Rheumatism, Diseases of the Bones, Joints, &c.	1	4	2	7	78
Diseases of the Skin, Cellular Tissue, &c.	...	2	1	3	9
Malformations	4	...	...	4	33
Premature Birth and Debility	29	1	...	30	211
Atrophy	23	1	...	24	216
Age	...	...	43	43	478
Sudden	5	6	...	11	86
Violence, Privation, Cold, and Intemperance	15	15	5	36	268
Causes not Specified	5	...	...	5	50

TO CORRESPONDENTS.

THE regular publication of Mr. Ancell's valuable Lectures on Blood Diseases, which have proved so acceptable to the profession, will be recommenced immediately. The Student's Number, and the obligations it involves are sad *impedimenta* to our usual routine. We must entreat our many correspondents to bear yet awhile with the delay that has occurred in the publication of their various communications, and to attribute their non-appearance to the causes we have indicated, and not to any insensibility to the importance of the papers they have commuuicated.

COMMUNICATIONS have been received from Mr. BRANSBY COOPER, "Lecture Introductory to the Course at Guy's Hospital;" Sir BENJAMIN BRODIE, Bart., and Mr. CHARLES JOHNSON, "Lectures Introductory to the Course of Study at St. George's Hospital;" Dr. LANKESTER, "Lecture Introductory to the Course of Study at St. George's School of Medicine;" Dr. GEORGE GREGORY, "Lecture Introductory to the Course of Study at St. Thomas's Hospital;" Mr. BENJAMIN PHILLIPS, "Lecture Introductory to the Course of Study at the Westminster Hospital;" Dr. ALDIS, "Lecture Introductory to the Course of Study at the Hunterian School of Medicine;" Dr. GOODFELLOW, "Lecture Introductory to the Course of Study at the Middlesex Hospital;" Dr. HECTOR GAVIN, "Lecture Introductory to the Course of Study at the Charing-cross Hospital;" Mr. WARD, "Lecture Introductory to the Course of Study at the London Hospital;" VERAX, with card enclosed, on the "Medical Protection Society;" Professor OWEN, Lecture XXth., on the "Generation of the Bivalve Mollusks;" Mr. ALFRED MARKWICK, on a "New and Effectual Mode of Producing Diaphoresis;" Mr. ANCELL, "Lecture on Blood Diseases;" Mr. EDSWORTH, "Pauper Practice," No. III; Dr. STEEL, of Glasgow, "Regulations Regarding the Granting the Diploma of the Faculty of Physicians and Surgeons of Glasgow; A CONSTANT READER, on the "Medical and Chirurgical Society;" Dr. JONES, of Washington; Dr. COPEMAN, of Norwich; Mr. WALSH, of Half-moon-street; A POOR CHEMIST'S ASSISTANT; DETECTOR; A UNION SURGEON; DR. SHERIDAN MUSPRATT'S wishes will be complied with; Dr. WALLER, on "Placenta Prævia."

LETTERS from the following correspondents are in type:—SPECTATOR, Dr. T. D. JONES, Dr. BARKER, Mr. ROSS, Mr. B. C. HENDERSON, Mr. HAKES, Mr. HAWKER, Mr. COWEN, and others.

THE following Publications have been received:—

Die Asiatische Cholera und die Gesundheitspflege. Von Dr. C. F. Riecke, Regimentsargt in Konigh. Preuss. Kadetten-corps.

Cholera and its Hygiene. By Dr. C. F. Riecke, Physician to Royal Prussian Military Cadets. Pp. 82. Nordhausen. 1850.

Der Kreiegsund Friedens-Typhus in den Armeen. Von Dr. C. F. Riecke.

Typhus in Armies during Peace and War. By the same. Pp. 378. Nordhausen. 1850.

Practical Observations on the Diet of Infancy and Childhood. By T. H. Barker, M.D., &c. &c. &c. Pp. 54. Simpkin and Marshall. 1850.

The British and Foreign Medico-Chirurgical Review, or Quarterly Journal of Practical Medicine and Surgery. No. XII. For October, 1850. London: Highley, Fleet-street; and Churchlll. 1850.

Monthly Journal of Medical Science. No. X. New Series. For October, 1850. Edinburgh: Sutherland and Knox.

Pharmaceutical Journal and Transactions, for October, 1850. Edited by Jacob Bell. London: Churchill.

The Veterinary Record and Transactions of the Veterinary Medical Association, for October, 1850. Edited by Messrs. Spooner, Simonds, and Morton. London: Longmans.

Medico-Chirurgical Transactions, published by the Royal Medical and Chirurgical Society of London. Second Series. Volume XV. Pp. 360. London: Longmans. 1850.

The Teeth and their Preservation. By Charles Vasey, Dentist. Pp. 31. Many Woodcuts. London: Renshaw. 1850.

Observations on Spinal and Chest Deformities; also a few Remarks on the Modes of Treatment generally pursued. By P. G. Hamon. M. O. Pp. 40. London: Delizy. 1850.

Fourth Report of St. Mark's Ophthalmic Hospital and Dispensary for Diseases of the Eye and Ear, for 1847—50. Dublin. 1850.

Oppenheim's Journal for Jannary, February, March, April, and May, 1850. Hamburg: Perthes-Besser and Manke.

On the Origin of Inflammation of the Veins, and on the Causes, Consequences, and Treament of Purulent Deposits. By Henry Lee, F.R.C.S., Assistant-Surgeon to King's College Hospital, &c. Pp. 91. London: Renshaw. 1850.

A Poor Chemist's Assistant may call at our Office.

A Union Surgeon.—We shall attend to the suggestions of our correspondent. Our own opinions are quite in accordance with his, and we trust that, when we develope our views, he will find our methods of redress equally accordant. We need not assure him how strongly we feel on this point, nor how desirous we are to do our utmost to aid him and those who act with him, in obtaining justice for the union surgeons.

[To the Editor of the Medical Times.]

SIR,—The subject of giving answers to the inquiries of Insurance Companies, seems to me to admit of a natural division into two parts,—first, what is due to my patient; and secondly, what is due to myself.

To my patient, I owe the same implied secresy on the subject of his personal health, which a lawyer owes to his client on the subject of his personal affairs; and I should never think of answering any inquiries about him without his express permlssion.

To myself, I owe the right of obtaining a reasonable remuneration for my trouble, in furnishing to an Insurance Company my professional assistance, and thus enabling them to decide on the fitness of my patient as a subject for life assurance.

I have, therefore, adopted the subjoined form of answer to the inquiries of insurance offices, and I shall be happy to join any gentlemen, who approve of such form, in having a number lithographed.—I am, Sir, your obedient servant,

C. R. WALSH.

42, Half Moon-street, Piccadilly, Sept., 1850.

"Sir,—I have received the permission of ——— to answer any questions which may be put to me in confidence respecting his health, for the purposes of life insurance.

"I am ready, therefore, on receiving the usual fee, to place at the disposal of your office whatever information I possess on this subject.—I am, Sir, your obedient servant,

"To the Secretary of the ——— Insurance Company."

[To the Editor of the Medical Times.]

SIR,—I beg to hand you the enclosed card:—

"PEARCE & FAWTHROP,
"SURGEONS,
"No. 2, SQUARE, HALIFAX,

Beg most respectfully to inform the inhabitants of Halifax and its Vicinity, that the practice of Medicine, Surgery, and Midwifery will be carried on as usual.

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"Messrs. P. and F. will feel obliged if those patients who wish to be visited will acquaint them of it as early in the day as convenient, especially if they reside in the country."

Pearce is the gentleman whom you have already noticed in connexion with Kirby, and Fawthrop is the same gentleman you have so recently commented upon in the columns of your journal.

A coalition has taken place between the two, and cards like the one I send are being distributed freely throughout the district.—I have the honour to be, Sir, your obedient Servant,

DETECTOR.

October 2, 1850.

THE MEDICAL PROTECTION SOCIETY.

[To the Editor of the Medical Times.]

SIR,—How much soever you may be disposed to find fault with the conduct of the management of the "Medical Protection Office," yet I am sure you will feel inclined to do justice to the present Provisional Committee, whose position, according to a statement in your journal of September 28, is not an enviable one, and is as follows:—

"It is reported that the managers have rejected the authority of a Committee of Inquiry appointed by the members at the meeting, and have privately got up a Provisional Committee, with a view to carry on the Society on an amended footing."

How far this portion of your Article is correct, you will learn from one who was present at the meeting held at the Freemason's Tavern, before the chair was taken, and when it was vacated.

At that meeting, a Committee to investigate the affairs of the Medical Protection Office was resolved upon, and a certain number of names proposed; but when it was found that no money was available to pay the expenses, the gentleman who proposed the motion withdrew it, and the Chairman, after making a few observations, declared the Committee and the meeting dissolved. Thus it will be seen that the manager did not reject the authority of a Committee of Inquiry.

On my return home after the meeting, I found a note from one of the gentlemen who was present, requesting my attendance at the Medical Protection Office the following day. I attended, and found that, after the meeting broke up, three gentlemen, members, had on their way home come to the determination to call together a few of the members to resolve on the best means to be adopted for the benefit of those who were sufferers by the failure of the manager, and to endeavour, if possible, to effect that, which the stormy meeting prevented,—the formation of a Committee to investigate the causes of the present position of the Office, &c. The managers knew nothing of the intention of those gentlemen who were the cause of this meeting; therefore it is not true that "the managers have got up a Provisional Committee with a view to carry on the Society," &c.

At this meeting a Provisional Committee was named; all present consented to become members. On the Monday following a second took place: other gentlemen gave their names, and a Provisional Committee was formed; resolutions were passed, &c. Each gentleman present, to defray the expenses of printing circulars to be sent to each member, and for other purposes, gave from his purse money, and strict injunctions were given that all monies paid into the office from that day, in behalf of members, should be set aside until called for by those for whom received.

I enclose my card, and will be ready at any time to prove the correctness of this statement if called upon to do so.—I have the honour to be, Sir, your obedient servant,

VERAX.

October 2nd, 1850.

[Since the receipt of this letter we have referred to our reporter for information upon the points adverted to by "Verax," and with respect to the statement, that "the gentleman who proposed the motion (for a Committee of Inquiry) withdrew it," he distinctly denies its correctness; and we are further informed, that so far from the Chairman having declared the "Committee" "dissolved," that gentleman has written a formal letter to the manager, requesting him to convene a meeting of this Committee of Inquiry, that they may commence their duties.

With reference to the allegation, that we are incorrect in stating that the *managers* have got up a Provisional Committee, we can only say, that if a knot of gentlemen, irrespective equally of the assent of the mauagers, and the wishes of the members as expressed at a public meeting, presume unauthorised to take into their own hands the affairs of the Society, we have less confidence than ever in its future proceedings.—ED. *Med. Times.*]

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The Pharmaceutical Journal (Oct. 1.)

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By order of the Senate,

R. W. ROTHMAN, Registrar.

Somerset House, September 30, 1850.

To Surgeons. — A Gentleman, a

Member of the Royal College of Surgeons, London, is desirous of entering into PARTNERSHIP in the South or South-West of England. Liberal terms will be offered. A reference as to character is allowed to the Rev. John Morison, D.D., LL.D., Brompton, and to the Rev. W. Legg, Reading, Berks, to the latter of whom letters may be addressed.

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September 18, 1850.

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LECTURE VII.

The Special Pathology of Tuberculosis.—The Identity of Tuberculous Diseases exemplified in Scrofula and Phthisis.—Rokitanski's Proofs.—Of Tuberculous Deposits.—Of Scrofulous Pus.—Of the more Solid Tuberculous Deposits.—Of Tubercle.—Its Microscopical Anatomy.—On the Seat of Tubercle.—On the Origin and Primary Development of Tubercle.—On the Consistence of Tubercle.—On the External Configuration or Form of Tuberculous Matter.—Dr.' Carswell's Description.—On the Classification of Tubercles, and the Relations which exist between the Grey and Yellow Varieties.

OF THE SPECIAL PATHOLOGY OF TUBERCULOSIS.

The subjects of tuberculosis in any of its grades, as a predisposition or as a confirmed disease, are acted upon by the same etiological influences, and are liable to pathological changes essentially the same as those which occur in the robust and healthy,—to congestion; to irritation and inflammation from external violence, or cold, or heat, or the action of irritating substances; to indirect debility from over excitement; to atrophy, hypertrophy, and other morbid epigeneses; to eruptive and other fevers, and all their consequences;—and it has already been stated that these diseases are liable to be materially modified in their symptoms, progress, and results, by the tuberculous affection of the blood. Among the most simple illustrations to be found, are the hypertrophy of tuberculous subjects, which is less dense, and has more of the vegeto-fungoid character than in the sound constitution; and the atrophy of structures having cellular membrane for their basis, which structures are rendered by the tuberculous state of the blood less favourable to the healing of ulcers than in the robust, and especially prone to a solution of continuity. In preceding lectures we have also shown that a tuberculous condition of the blood, with the deviations from the healthy state of the solids resulting therefrom, acts as a powerful and continual predisposition to a long catalogue of the ordinary diseases of mankind, and that it modifies the effects of all our usual remedial agents. But there is a special pathology of tuberculosis which belongs to no other disease. The most essential and ultimate feature of this specialty of tuberculous blood is the deposition and aggregation of tubercle. Tuberculosis is characterised also by a great tendency to the occurrence of hæmorrhage, especially of hæmoptysis, and by a modification of the ulcerative and suppurative processes, either with or without the deposition of tubercle. From these essential tendencies of a tuberculous state of the blood, the disease is liable to assume a great variety of forms, according to the exciting or occasional causes of disease to which the subjects of it may be exposed, and the age, sex, stage of the malady, and other circumstances, under which those causes may be applied; and according to the seat and extent of these pathological changes, and the occurrence of one or more of them successively or simultaneously. These varieties of tuberculosis will have to be fully detailed on a future occasion, but the following may be enumerated as the most prominent examples:—Scrofulous hypertrophy of the lymphatic glands; scrofulous ulceration; scrofulous affections of the bones; scrofulous affections of the joints, particularly of the hip and knee-joint; scrofulous ophthalmia; tabes mesenterica; tuberculous meningitis; tuberculous disease of the peritoneum; phthisis pulmonalis; sensorial lebetude, and probably insanity; probably, also, deafness, dumbness, blindness, and cretinism. These serious diseases are specially characterised by the peculiar pathological products of tuberculous blood, or the tuberculous modification of the ordinary products of disease; and these products accordingly demand, and of late years they have received, a very great share of attention. In this and the following lectures we shall consider the anatomical, microscopical, and chemical history of these products.

OF TUBERCULOUS DEPOSITS.

Under this head I include the morbid secretions and deposits which appertain essentially to a tuberculous state of the blood. Whenever these secretions present the characters about to be described, or from the moment that tuberculous deposits occur, according to the organ or tissue affected, the symptoms of the general disease are liable to become complicated, and the case assumes the form and character of one of those varieties which have been regarded, both theoretically and practically, as so many distinct or idiopathic affections, as well exemplified by many of the diseases just enumerated.

It is necessary in this place to meet the question of the identity or non-identity of scrofula and phthisis. Using these terms in the general acceptation, the one, according to the view here taken of tuberculosis as a disease of the blood, is a distinct and most important variety or form, and the other a series of varieties or forms, of tuberculosis.

The word "scrofula" has been used in various senses. Sometimes it designates a morbid condition of the constitution, acting as the cause of some one or of various local diseases. (a) It scarcely need be said, that I abandon its employment in this sense, and substitute the term tuberculosis. At other times it designates some local affection grafted upon an unknown morbid state of the constitution, as a peculiar form of ophthalmia or a peculiar affection of the knee-joint. Various degrees of latitude or limitation have been given to the local affections thus designated as scrofulous. Mr. Phillips has adopted a swelling of the lymphatic glands as his diagnostic sign of scrofula. This, to me, is a new limitation. According to the view I am led to take in this investigation, numerous local affections occurring in the subjects of tuberculosis, are properly called scrofulous, as swellings of lymphatic glands, affections of the bones and joints, cellular abscesses, and the like; but their scrofulous character is wholly dependent upon the tuberculous state of the blood. Tumid glands, caries of the bones, and inflammations of the joints, are not scrofulous in otherwise healthy subjects. Thus scrofula is some local manifestation of tuberculosis.

But the deposition of tubercle in particular organs also takes place, according to universal assent, in a particular condition of the constitution. This state of the constitution I have referred to an idiopathic disease of the blood, which I have designated and described in preceding lectures as tuberculosis. Tubercle is a local manifestation of tuberculosis.

The whole question then is—whether the disease of the blood which leads to the deposition of tubercle, and that which gives the specific character to scrofulous affections, are essentially the same? I believe they are, and that the domains of pathology contain irrefragable proof thereof.

The chemical and physical details already given of the state of the blood in scrofula, and in the predisposition and incipient stages of local tubercular diseases, to a certain extent establish this identity. The peculiarities of the constitution which characterise the predisposition to tuberculous affections and scrofulous affections, respectively, establish their identity. It is true, that some of these peculiarities appertain more especially to one form, and others to another form of the disease; but, as a whole, it is the same predisposition which tends both to scrofula and tubercle. The signs and symptoms of general disease, when that supervenes on tuberculous or scrofulous affections, are essentially the same. Scrofula and tubercle frequently co-exist in the same individual. Tubercle is met with in unequivocally scrofulous local diseases. When the subject of etiology is before us, it will be shown, that in tuberculous families some individuals are affected with scrofula, and others with tubercle, and also that scrofulous parents frequently have tuberculous children, and tuberculous parents scrofulous children. From the facts about to be detailed, it will be seen, that the local products of scrofula and of indisputable tuberculous disease, have the same anatomical elements, and there are many strict analogies in their chemical composition. Both are subject to the same metamorphosis of softening and cretification, and, in the words of Rokitanski, whose opinion is said to be

(a) "De l'Analogie et des Différences entre les Tubercules et les Scrofules." Par Dr. A. Legrand. Paris, 1849.

founded on an experience of from thirteen to fourteen thousand cases, "the tuberculous and the so-named scrofulous ulcers are entirely similar, not only when they occur in the same organ, but when they occur in different organs, and affect different structures, as in scrofulous ulcers of the skin, and tuberculous ulcers of the intestines; and the same is the case with respect to their cicatrices. . . . Both occur in the same organ, sometimes with and at other times without the symptoms of inflammation, and are very often found associated. The same substance will often be called tubercle or scrofula, according as it occurs in the lungs or in the bronchial glands."

Lugal's authority, founded upon his vast experience, ought not to be despised. He regards scrofula as a hereditary affection of the entire system which may result in diseases of every organ and tissue; and the production of tubercle as the maximum of that affection. Owing to the modifications which take place in the local vitality of different parts of the body at different periods of life, the development of tubercle occurs in different organs.(a)

The above and many other facts prove incontestably that scrofulous affections and tuberculous affections, regarded as local diseases, have a common origin. At the same time, the full force of the proposition, that external scrofula, in its seat, form, history, progress, and results, differs very considerably from those forms of disease characterised by the internal deposition of tubercle, cannot be questioned.

It is not held that the condition of the blood in the purulent diathesis of scrofula and in the tuberculous cachexia of phthisis, for instance, is, at the period of the occurrence of these forms of disease, identically the same; but that the whole of this series of maladies has its origin and essence in a pathological condition of the blood of the same nature. The malnutrition within the physiological range, constituting the predisposition — the general disease, at whatever period of life it may present itself—the local effects—have all a similar starting-point in the disease of the blood. The blood itself, like the more solid structures of the body, is subject, even in health, to modifications in its composition and vitality, according to sex, age, temperament, and other circumstances. Physiologically, the blood in infancy, juvenescence, mature age, and senility, undergoes progressive changes. Tuberculous blood, besides differing as to the degree in which it is tuberculous, is subject to all the same modifying circumstances. Hence blood deviating very slightly from its healthy state, may lay the foundation for very partial irregularities of development in the fœtus, and a very slight predisposition to disease, and it may never, under favourable circumstances of extra-uterine life, declare itself as actual disease; or, being more radically and decidedly diseased, its effects may be such as to destroy the embryo at any period of its development. Hence, also, the blood, tuberculous to a certain degree and at a certain age, as in juvenescence, may be sufficiently healthy in its constitution, and endowed with sufficient vitality, to produce a nutritive blastema for all the tissues; but, at the same time, its condition may be so much below the standard of perfect health, that when, for instance, a part is subjected to the causes of inflammatory action, there is a morbid tendency to exude pus of bad character; the tissues themselves, from their debilitated structure, being extremely liable to ulceration. In a few words: the tuberculous blood of juvenescence may act as a predisposition to the suppurative and ulcerative affections which constitute so considerable a portion of those forms of tuberculous disease which are classed under the denomination of scrofula. Hence, again, this same tuberculous blood may have its vitality so much diminished, and its qualities deteriorated to such a degree, even in infancy, as to be prone to exude, in one or more organs, an absolutely innutritious blastema—a blastema in which organic cells are not formed at all, or are imperfectly formed—a liquor tuberculosi. Or, under the modifications resulting from age, the cessation of growth and development, or changes in the habits of life, or hygienic circumstances, the same tuberculous blood which in early life would produce scrofula, at puberty inclines to tuberculization. "Scrofulosis" being a disease of most frequent occurrence in infancy, and tuberculosis of puberty, is no argument against the identity of the two; it only shows that the different periods of life determine the development of the disease in a different stage and under different forms. "The scrofulosis of infancy is but the tuberculosis of puberty, and the contrary."(a) The deposit of tubercle, in organs essential to life, is a general cause of death in the scrofulous. A proposition identically the same is laid down by Lugol, and this author supports his statement by the results of his very large experience; from which he declares, that he has ascertained the existence of scrofula, in one or other parent, of more than half the cases of consumption which came under his notice; and as a general rule, he found internal tubercle in those who died of scrofulous diseases. In order to render this view of the case more complete, it may be added, that should the victims of this morbid condition of the blood, either escape an attack of disease during the early and middle periods of life, or recover from scrofula, phthisis, or any other local and usually fatal consequence, the progressive changes which take place in the economy as time goes on are favourable to the recovery of the healthy physiological standard, both in the blood and solids, and the tuberculous habit of body may be completely regenerated, and the individual may either attain longevity or his existence may be terminated by some disease of a totally different nature.

If tuberculosis and scrofulosis, employing the latter term to designate the constitutional affection which attends local scrofula, are essentially the same, the products of tuberculosis, whether in its early or advanced stages, in the form of scrofulous pus or tubercle, ought to be brought into juxtaposition; and I cannot help thinking, that had physiological chemists more completely investigated their analogies and differences, and more fully developed their history, as special products of diseased blood, that considerable advantage must have accrued. It is on this ground that I associate under one head scrofulous or tuberculous pus and tubercle as morbid products of tuberculous blood.

(a) TUBERCULOUS OR SCROFULOUS PUS.

Pus is a secretion from the blood, consisting, it is scarcely necessary to remind the pathologist, when it first exudes from the vessels, of a fluid more or less closely resembling the liquor sanguinis. To this fluid the term "liquor puris" has been applied. As compared with the liquor sanguinis, it is possessed of a low power of organisation, and forms, very quickly after its exudation, into a thin fluid resembling the serum of extravasated blood and an organised microscopical globule, known as the "pus corpuscle" and composed of protein compounds. The fluid resembling serum and the corpuscle, together constitute the bland, apparently homogeneous thick liquid, so easily recognised as laudable or normal pus.

As the blood from which the liquor puris is derived, and the vessels which it must permeate, are subject to variations in structure, and in their vital powers and properties, so pus is liable to considerable modifications in colour, consistence, chemical composition, and other qualities, according to the tissue or organ in which it is secreted, the age and constitution of the individual, or the particular disease in which it occurs; and the state of the blood, under all these circumstances, exercises the most direct influence over the characters which it presents.

There is nothing in tuberculous blood absolutely to prevent the secretion of a blastema susceptible of transformation into true pus, as happens, for instance, in some gangrenous and scorbutic diseases. The tuberculous condition of the blood is, on the contrary, extremely prone to the production of pus, and in the most aggravated forms of tuberculosis, this liquid will form in abundance to the last. As, however, there is no product of the animal economy which exhibits changes of the blood sooner than pus, where the blood is tuberculous, a very great tendency to the formation of unhealthy pus obtains. Tuberculous blood, wherever formed, most frequently produces pus so much changed in its general characteristics, that it can be distinguished as tuberculous or "scrofulous" with the naked eye, by the most cursory observer.

As the minuter shades of deterioration of the blood in tuberculous individuals, are with difficulty tested by experiment, so is it with pus; chemistry has frequently failed to detect these differences; nor has the investigation been very

(a) "Recherches et Observations sur les Causes des Maladies Scrofuleuses." Paris, 1844.

(a) Constatt, as reported in the *British and Foreign Review*, Vol. XIII., p. 341.

diligently pursued. So far as observation and experiments extend, the folowing facts are to be gleaned.

Tuberculous pus, whether derived from forms of disease denominated scrofula, or from tissues in which tubercle has been deposited, is in general more fluid than laudable pus, corresponding with the aqueous state of the blood; and its coagulable or protein constituents are more of a caseous quality; corresponding, in some unknown manner, with the vitiated condition of the liquor sanguinis. This fluid and caseous condition renders tuberculous pus liable to become grumous; hence it frequently resembles coagulated milk, and evinces a disposition to separate into a solid and fluid part, or to present the appearance of cheesy matter floating in an albuminous fluid. Its fluidity, after the formation of the pus corpuscle, disposes its albumino-caseous portion more readily to solidification than healthy pus, owing to the facility with which the fluid is absorbed, and this tendency interferes with the usual healthy and reparative results of suppuration, by the formation of heterologous solid deposits of variable characters.

According to some pathologists tuberculous pus exhibits peculiarities in its earthy and saline constituents. Rokitanski describes it as acid. Gendrin states that it contains more soda and chloride of sodium than ordinary pus. Preuss confirms its caseous character, and remarks on its analogy in this respect to tubercle. Andral also remarks, that it has often a tendency to assume the appearance of tubercle.

Tuberculous pus, as it present itself to the eye, is occasionally thicker than ordinary pus, and bears a closer resemblance to curd, as in scrofulous glands and abscesses, and in vomicæ; and, in these respects, differs from pus produced by inflammation in healthy subjects.

Vague as our knowledge is of the essential difference between tuberculous and laudable pus, the facts are sufficient to establish in the former qualities analogous to those of tubercle, as will be seen when the characters of the latter have been described.

(b) OF THE MORE SOLID TUBERCULOUS DEPOSITS.

Tuberculous deposits, whether resulting from suppuration and the absorption of the more fluid parts of pus, or without any inflammatory or suppurative process, exhibit very great anatomical variations. They may be dense or firm, or soft and crumbling like new curds, or laudaceous; but, according to Vogel, whatever physical character they present to the naked eye, they have a general uniform microscopical character. They consist of three parts;—1. An amorphous stroma; 2. Molecular granules; 3. Undefined cells and cytoblasts from a 600th to a 300th of a line in diameter. The granules consist of protein compounds and calcareous salts, and partly of fat, being distinctly interspersed with fat globules. Tubercular deposits present themselves in various forms, but they have been most studied in the form of tubercle.

TUBERCLE.

This is a peculiar amorphous product of tuberculous blood. In its very earliest stage it has been described as a minute white cloud, placed in healthy parenchyma, and imperfectly circumscribed, with points proceeding from the cloud, which in process of time coalesce or become enlarged. From the earliest moment that it can be observed as a distinct pathologico-anatomical element, it occurs in the form of minute particles, larger than the air-cells of the lungs, which present the following characteristics.

The particles are solid, opaque, or slightly transparent, more or less dense and friable, somewhat rounded, and, on close examination, appearing to send out ramifications from their periphery of a greyish or yellowish colour, dull aspect, or free from glossiness. They are at first extremely minute, and fill up the interstices of the elementary tissues, but appear to have no other connexion with them; they rarely exceed the size of a pin's head, but gradually, and sometimes rapidly, increase in bulk.

The pabulum of their formation is derived from tuberculous blood. As healthy blood supplies a blastema or succus nutritivus for healthy nutrition, tuberculous blood supplies a liquor tuberculosi, from which tubercle is formed. Other products of tuberculous blood, when the structures become inflamed, or otherwise diseased, as pus, coagulable lymph, false membrane, &c., are liable to be more or less mixed with, or even wholly superseded by, the deposit of tubercle.

On microscopical examination, tubercles are found to be composed of the three elementary constituents of tuberculous deposits generally. I. A semi-transparent, greyish yellow, amorphous, vitreous, solid stroma, occurring in masses, and having a micro-chemical correspondence with coagulated fibrine, but never containing fibres. This has been otherwise described as an inter-globular hyaline substance. II. Molecular or elementary granules, varying from 1-10,000th of an inch in diameter to an inappreciable minuteness, generally rounded and congregated in masses, presenting a brownish tint. These masses, however, occurring in the stroma, are differently constituted. *a*. Some appear to be modified protein compounds; *b*. Others consist mainly of fat; *c*. A third kind are principally calcareous salts, consisting of carbonate and phosphate of lime. III. Imperfectly developed nuclei, or cytoblasts, and also cells,—the cells being in general very defective, from a 600th to a 300th of a line in diameter, of an irregular shape, rarely round or oval, frequently angular. Lebert and Dr. Hughes Bennett state that they never contain nuclei; but the former describes from four to ten granules in their centre. Vogel and Gulliver describe them as nucleated; a distinct nucleus, however, being rarely to be recognised. Henle states that these corpuscles are nothing more than the so-called *elementary corpuscles*, and particularly that variety which becomes pale, and dissolves in acetic acid. He believes that they proceed from cytoids or corpuscles, exposed for some time to the air; he recognises, however, in other cases, limpid cells of larger size furnished with a nucleus; more rarely with several nuclei. Although Schultz and others deny that cells are essential to tubercle, conceiving that they occur only in the latter stages, and indicate the formation of pus, the existence of these bodies has been generally admitted; they are regarded generally as cells in a low stage of development, and by most pathologists as an invariable and peculiar element of tubercle.

The amorphous substance is present from the moment tubercle can be recognised as a solid deposit, and the greater part of the granules are also present from the first; the imperfect cells and cytoblasts make their appearance gradually. These three elements are observed in individual cases, in very different proportions; the protein granules most frequently predominate; sometimes the calcareous granules prevail; the fatty molecules are rarely in excess; sometimes no trace of cells can be discovered; and, at others, the whole mass of tubercle appears to consist of cytoblasts and cells.

Tuberculous matter occurs, however, either in the form of distinct tubercles, or as tubercular infiltration; and tubercles have constantly presented themselves from the commencement of their formation, even to the naked eye, in the two following forms or varieties:—

I. *Grey Granulation.*—The simple fibrinous tubercle of Rokitanski. This is the most frequent form. Tubercles of this kind are of a greyish-white colour, semi-transparent, and homogeneous, having the appearance of coarse scalded groats, but firmer, and communicating a granular or fibro-granular sensation to the finger on pressure. Their size is pretty uniformly intermediate between that of a grain of mustard and a millet-seed. They consist of the amorphous stroma already described, and of the cellular formations, but are deficient in granules, which explains their degree of transparency, their colour, and smooth section. Lebert states, that from their earliest formation they contain tubercle cells, and are, therefore, a genuine form of tubercle; by others they are regarded as a distinct form of abnormal nutrition. Henle describes them as consisting of imperfectly coagulated fibrine.

II. *Yellow Tubercles.*—These are the croupo-fibrinous tubercles of Rokitanski. They are yellow, thoroughly opaque, cheesy, or caseo-laudaceous, in the form of roundish nodules, or as irregular, nodulous, ramifying masses; or, when occurring on free surfaces, having the form of glandular nodulated layers, for the most part exceeding the size of the grey granulations, being sometimes as large as a hemp-seed, and presenting an irregular granular section; the whole of these characters apparently depending upon an excess of granular matter.

Tubercle presents varieties, as shown by different degrees of colour, opacity, consistence, and solubility, and these arise from varying proportions of stroma, molecules, nuclei, and cells; there are also great differences presented by grey granulations as to colour, transparency, and consistence. Rokitanski has made he important observation, that every

degree of commixture of the blastemata of grey and yellow tubercle, and of a perfectly organised or fibrinous blastema occurs, giving rise to innumerable varieties of this pathological epigenesis. This part of the subject will again have to be adverted to under the head of "the Phases of Tubercular Development."

The tubercular infiltration occurs more diffusely, being infiltrated among the tissues, in a less regular manner, owing apparently to the rapidity and abundance of the tubercular secretion within a circumscribed space.

ON THE SEAT OF TUBERCLES.

Much has been written, and great differences of opinion were for a long time entertained, as to the true seat of tubercular aggregation. The whole subject has been very completely investigated, and we are indebted to the labours of Carswell, Andral, Rokitanski, and other modern pathologists, for the tolerably accurate knowledge we now possess. The position which tubercle occupies in the various organic structures, is confirmatory of the view taken in these lectures of its origin from a morbid blastema, derived from vitiated liquor sanguinis.

Andral laid it down as a principle, that tubercles may be developed in any of the tissues, but their most usual seat is the cellular tissue; and it appears to be clearly demonstrated, that their deposition is independent of any particular structure, since they have been actually found in the greater number of the organs and tissues of the animal body. Their most general position, however, is the cellular vascular tissue of the organic textures; the seat of nutrition and secretion. In the lungs they occur within the air-cells, in the minute bronchial tubes, and in the parenchyma. This pathologist observed that, the air-cells being dilated, their walls were thickened, and presented a peculiar yellow tinge, the tinge being deeper in some points, and there were a number of yellow round bodies, indicating the change pending the secretion of tubercle, in the thickened parietes. Tubercles, in fact, may be detected by the microscope, and even with the naked eye, in the cellular vascular tissue forming the parietes of the air vesicles, and of the minute bronchial tubes opening into these vesicles. The subserous, submucous, and intermuscular tubercles, are evidently developed in this tissue. In the spleen, brain, liver, kidneys, testicles, and lymphatic glands, it is sometimes difficult to prove that the morbid product belongs to this tissue. Tubercles are formed in the air-cells, in the interior of tubes and cavities lined with mucous membrane, and in the mucous follicles, without any ulceration; which shows that they are not developed only in the areolar tissue, and also the probability that they occur in other tissues besides the cellular. The more particular seat of intestinal tubercles is manifestly the cellular texture between the muscular and mucous coats; in meningitis granulosa, their seat is mostly beneath the pia mater, especially in the neighbourhood of its vascular arborisations, or occasionally beneath the arachnoid membrane. Carswell regards the mucous tissue as more susceptible of tubercular deposition and aggregation than any other structure in the human body; so that, in whatever organ the formation of tubercle takes place, if the mucous tissue forms a part of that organ, it is either the exclusive seat of the tubercle, or it is more extensively affected with it than any other of the systems or tissues of the same organ; he further states, that the free surface of the serous membranes, the parenchyma of organs, and even clots of blood, are obnoxious to it, and that the tubercular matter fills the interstices of the elementary tissues closely; perfectly investing, but not displacing or altering them; and they are much less frequent in the serous than in the mucous tissues. In rare cases they are deposited between the coats of the arteries, a fact which, as remarked by Lebert, indicates their origin from the blood. Tubercles are sometimes deposited within the blood-vessels; but, notwithstanding the opinion which has been maintained, that this is their original seat even when occurring in the lungs, the occurrence is extremely rare. Wherever *liquor sanguinis*, or coagulated lymph proceeding from it, occurs, there may tubercle be met with; and Rokitanski remarks, that its seat "may be any point of any tissue external to vessels; in short, wherever there is a capillary system, there tubercle may be separated. It must be deposited at or very near to the place of exudation, in consequence of the highly coagulable nature of the blastema; hence it cannot occur in such tissues as cartilage, which are merely nourished from a prolonged saturation of their substance by plasma."

We have stated, that tubercle is independent of the original tissue, but there is a relation which it bears to it which must not be overlooked. The tuberculous material does not appear to be a substitute for the materials of the tissues. The tissues may be nourished, and tubercles may be formed from the same blood or the same blastema, and yet, although the tissues are imperfectly nourished from the tuberculous blood, they are not *converted* into tubercle. Microscopical observation establishes this point. Moreover, so long as the blood or liquor sanguinis merely nourishes the structures imperfectly, there is no such thing as tubercle. It is not until the blood exudes with the succus nutritivus, some combination of elements incapable of transformation into tissue, that an aggregation of tubercles takes place. When a tuberculous state of the blood exists, and continues unchecked, certain tissues are first degraded in their nutrition and organization, and then, the disease of the blood progressing, tubercles may form in the greater number of the tissues or organs of the body under the operation of various exciting causes. The original tissue ultimately becomes destroyed by the operation of mechanical and vital causes. Thus, when tubercle fills contiguous air-cells, or contiguous cells of the areolar tissue, the parietes are destroyed by pressure; if it be accumulated in several adjoining vessels, as in those of the parietes of the air-cells, or in the minute bronchial tubes, the parietes of the vessels are also destroyed by pressure; and this destruction is promoted by the low degree of vitality and the mal-nutrition of the respective tissues, the whole favouring the production of tubercle in the mass.

Some organs and tissues are much more liable to tubercular deposit than others. We have remarked, on the authority of Dr. Carswell, on the great liability of the mucous tissues. In the adult, the lungs and the intestinal canal are much more liable to them than the brain or liver. Those organs which are most liable in the adult are not so in children, so that we have a different scale of susceptibility for early life. In some vascular organs, as the salivary glands and ovaries they are very rare. They are equally rare in the œsophagus, the inner coats of the vessels, and the vagina. Again, in each organ tubercle is most liable to be deposited in some particular point; (a) "in the lungs, it is first separated and concentrated in the apices and upper third of the superior lobes; in the pia mater, the portion investing the base of the brain, from the optic commissure to the pons and medulla oblongata, is the part attacked; the same is the case in the brain with the grey matter and the structure contiguous to it; in the osseous system with the spongy bones; in the intestinal mucous membrane, with the lower part of the ileum; in the laryngeal mucous membrane, with that portion which invests the muscul. transvers. glottidis; in the testicles, with the epididymis; and, in the female sexual apparatus, with the mucous membrane lining the tubes and the fundus of the uterus." On the other hand, the deposit of tubercle, in a few cases, meets with limits beyond which it cannot pass; thus, tubercle deposited in the larynx scarcely ever extends to the pharynx, and uterine tubercle is limited by the os uteri, and leaves the cervix and vagina unaffected. Many of the above and other circumstances lay the foundation for numerous varieties of tuberculosis as a disease of the blood; as tuberculosis pulmonalis, glandulosæ, peritonei, &c. &c., which require to be fully treated of, in order to complete the history of the disease.

OF THE ORIGIN AND PRIMARY DEVELOPMENT OF TUBERCLE.

The facts before us can, I think, leave no doubt of the origin of tubercle from the blood. The most rational view, although questioned by Andral, but admitted by many pathologists of the highest reputation, and deduced from the facts relating to its seat, from the microscopical description, and from the chemistry of tubercle, is—that the formative material is usually a cytoblastema secreted from morbid blood in a fluid form, by the capillary vessels, and that the aqueous particles are subsequently absorbed. Although the fluid has never been observed or collected—a remark which applies to the healthy nutritive blastema—and we have no direct observation to prove that the one differs from or resembles

British and Foreign Review, January, 1848, p. 174.

(a) *British and Foreign Review*, Jan. 1848, from Rokitanski.

the other—the micro-anatomical history already described, and the chemistry which will subsequently be fully given, lead to the just inference, that the one is a modification of the other.

When the deposition has once commenced, the tuberculous material has the power of drawing particles for increase from the tuberculous blastema which surrounds it, and probably from the blood itself; and there is a constant tendency to aggregation ; an increase of the volume of the mass taking place in consequence. This increase of bulk is gradual, but sometimes very rapid. The liquor tuberculosi being exuded and infiltrated among the tissues, the increase takes place mainly by the juxta-position of particles around a primitive nucleus of tubercle ; the tubercles, as already stated, in no instance forming part of the molecular tissue, but the vessels and fibres of the part ultimately becoming compressed, and the former emptied and impervious ; hence, if vessels or fibres be found in tubercle, they are the remains of the original structure.

Although the increase of tubercle proceeds mainly by the juxta-position of molecules merely deposited, yet, in so far as the morbid product exhibits traces of cell-growth, however imperfect the cells may be, the growth is partly produced by the intersusception of other particles.

THE CONSISTENCE OF TUBERCLE.

Tubercle is uniformly described as a solid ; at the same time, all analogy leads to the inference, that its secretion takes place originally in a fluid form. In truth, its micro-anatomical character, cannot be accounted for on any other supposition. We must accordingly admit, that its watery part is absorbed, and hence it presents various degrees of consistence. After its deposit and aggregation to a considerable extent, it may become firmer, as frequently happens in the lymphatic glands ; or it may become softer by the infiltration of a larger portion of fluid. Its consistence is various, also, according to the organ or tissue in which it is developed. Tubercles of the brain are frequently harder than those of the lungs or intestines.

EXTERNAL CONFIGURATION OR FORM OF TUBERCULOUS MATTER.

Dr. Carswell, who has best treated this part of the subject, states, that the round form which tubercle is said to present is a purely accidental circumstance, is common to many other morbid products, and expresses one only, and perhaps the least important, of the many forms which this matter assumes in the several organs in which it is found. Thus, from the homogeneous nature of the cerebral substance, and the equal resistance which it opposes to the accumulation of the tuberculous matter, the form of the latter must be nearly round. Such, also, and for similar reasons is its form in the cellular tissue. But in other organs the form is as various as that of the parts in which it is contained. It assumes the outline of a shut or open globular sac, if confined to the secreting surface, and of a solid globular tumour of various sizes, if it fills completely the cavity of the air cells ; and, for similar reasons, it presents in the bronchi a tubular or cylindrical form, having a ramiform distribution, terminated by the cauliflower arrangement of the air cells. In the mucous follicles its form is similar to that which it receives from the air cells. In the biliary system it has a racimiform distribution, from its being contained in the ducts and their dilated bulbous extremities. In the cavity of the uterus and Fallopian tubes, the infundibula, pelvis, and ureters, in the seminiferous ducts and prostate gland, in the lacteals, lymphatics, and their glands, it is moulded to the respective forms of each of these parts.(a) On the surface of serous membranes, whether natural or accidental, it may have either a globular or lamellated form, as the secretion in which it originates may have taken place in distinct points, or from a continuous surface of greater or less extent.

When the secretion of tuberculous matter takes place in such a manner as to become disseminated throughout a considerable extent of an organ, as when it is said to be infiltrated, it has then no definite form, unless it occupies, for example, the whole of the lobe of a lung, when it assumes that of the affected lobe. The granular arrangement of tuberculous matter in the lungs is owing to the accumulation of this morbid product in one or more contiguous air-cells ; and the lobular character which it sometimes presents in the same organ is produced by its being confined to the air-cells of a single lobule, the neighbouring ones being healthy. Examples of these three forms are given by Dr. Carswell in his 55th Plate.

(a) Pathological Anatomy.

THE CLASSIFICATION OF TUBERCLES, AND THE RELATION WHICH SUBSISTS BETWEEN THE GREY AND YELLOW VARIETIES.

Authors have materially differed in the distinctions drawn of tubercle, and in the classification they make of the varieties which it presents. Bayle regarded the miliary or grey granulation as a distinct variety, and this opinion has been held by many subsequent writers. Laennec and his followers regard this merely as the germ of all other varieties. The lungs are sometimes studded with these miliary tubercles, nearly of the same size and character throughout, as if they really were distinct. Sometimes, in the same organs, a portion of the tubercles are in the miliary state, another portion progressive, and another mature, as if they were the same in kind, but in different stages of development. The appearance which they present is again, in some, as if composed of albumen or fibrine ; in others, of ill-conditioned curdy material, resembling cheese ; and in a third kind, like moist mortar, from containing calcareous matter. All these appearances are sometimes found in one and the same case, as if they typified successive changes in tubercles originally of the same nature.

I have already stated, from Rokitanski and other pathologists, the basis upon which variations in the form and appearance, presented by tubercular deposit generally, are founded. The most important question respects the relations which subsist between the grey induration and the yellow tubercle. Three forms of the grey matter are described. 1. Grey granulations or small roundish tumours. 2. Grey masses surrounding cavities. 3. Large grey masses, inclosing a few yellow tubercles. Louis states, that he hardly ever met with a case of yellow tubercles without the presence of grey granulations. Laennec maintained, that the original form of tubercle is the grey, semitransparent granule ; and Armstrong, with many other pathologists, remarks, that all the facts incline to the opinion, that the miliary tubercle is the original form, of which the rest are only modifications. Chomel and Andral disbelieve in the identity of the two, and the latter has the remark, that if this were the case, grey granulations should have been found in every part of the body where tubercles occur ; whereas, they have not been observed in the lymphatic glands, brain, liver, spleen, submucous, or intermuscular tissues, wherein yellow tubercles are so frequently aggregated. Lebert has more recently advocated Laennec's view ; he states, that the grey granulation is a genuine form of tubercle, its transparency and colouring being produced, partly by the close juxta-position of the tubercular corpuscula, in consequence of uninjured pulmonary fibres, partly by the presence of a large proportion of connecting matter ; the tubercle corpuscles being kept together at the beginning, in serous membranes, by fibres of the membrane ; but as soon as, by the increase of the tubercular secretion, the fibrous element is greatly compressed, the tubercles become yellow. Blakiston, with other respectable authorities, considers the grey induration as an imperfectly-organized substance, which may occur independently of tuberculosis, but which, in tuberculosis, descends still further in the scale of organization, and is converted into, or displaced by, tubercle. In this sense it may, in some cases, be the first stage of tubercle, but not a stage, as supposed by Laennec and Louis, through which tubercle must necessarily pass before acquiring its own peculiar character ; nor must it, of necessity, be followed by tubercle. He regards it as the product of chronic inflammation, yellow tubercle being developed subsequently to the inflammatory process ; and many interesting cases are given to establish this doctrine. It is considered that it is precisely the same as when plastic lymph is first secreted as a consequence of inflammation, and tubercles are formed in the resisting membranous bands, since these bands must have existed before the tubercles could have been deposited. In further proof of the non-identity of grey granulation and yellow tubercle, Dr. Campbell has attempted to show, that the chemical re-actions of the former, and of yellow tubercle, are not the same, the one being more prone to putrifaction than the other, and the action of alkalies pointing to some differences ; but these differences (admitting them to exist) give no positive information on the fundamental question.

It does not appear to me that even yet the precise relation between grey granulation and yellow tubercle has been made out. The statements of Vogel, and other microscopical anatomists, that grey granulation is composed of the same elements as yellow tubercle, the amorphous stroma and corpuscles being more numerous in proportion to the granules in the former, and the scarcity of the granules accounting for its transparency, must be received. But this does not appear to me to affect the question, whether the grey granulation is or is not necessarily the result of chronic inflammation. My own view of the facts is as follows:—Tubercles may be developed in the products of inflammation—in plastic lymph, for instance; they are especially liable to occur in grey granulation, whether this be regarded as an inflammatory exudation or not. Now I hold, that neither in lymph nor in grey granulation could tubercle occur unless the blood were in a tuberculous state. In the case of plastic lymph, I consider it most probable, that the aggregation of tubercle takes place from a nidus deposited from the exuded liquor sanguinis and operating as a focus of attraction; and that its increase may be promoted or retarded by an increasing or diminishing tuberculous state of the blood, the morbid blastema being more or less charged with the essential material of tubercle, as the blood may be more or less tuberculous. If the grey induration be a product of inflammatory action, it must still be a product from tuberculous blood. It is a product of inflammation in tuberculous subjects; and I regard the deposition of yellow tubercle in grey matter in the same point of view as when produced in plastic lymph; a more perfect tubercular nidus becomes established within the grey matter, which results in the aggregation of more perfect yellow tubercle.

[To be continued.]

LECTURES
INTRODUCTORY TO THE LONDON COURSE OF MEDICAL STUDY.

ST. THOMAS'S HOSPITAL.

By GEORGE GREGORY, M.D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, AND ONE OF THE LECTURERS OF THE SCHOOL.

Mr. Treasurer and Gentlemen,—Before I can engage with any satisfaction to myself, in the honourable office which has been assigned to me, of formally opening the medical session in this school, I must offer some explanation of the circumstances which have caused the task to devolve on one who is comparatively a stranger in this place. With the most perfect sincerity, I can say, that no personal ambition has placed me in this post of honour—that I am no volunteer in this "forlorn hope" of the medical campaign. I profess no sympathy with Juvenal in his indignant exclamation,—

"Semper ego auditor tantum?"

On the contrary, my own wishes would have been better consulted, by exchanging the literary throne, which for a brief hour I am destined to occupy, for one of the benches below me, whence I might have listened to some teacher of this school, more familiar with the distinctive features of its educational system, and more competent to make some adequate return for that generous feeling which has drawn together, (I fear at much sacrifice of personal and social comfort,) the large assemblage which I see before me. But the medical officers of the hospital pressed me into the service, and, intimating that my acquiescence in *this* would facilitate other arrangements, left me no other alternative than that of waiving my own scruples, and submitting, with becoming deference, to the decision of my colleagues.

One other preliminary intimation cannot with propriety be overlooked. To borrow the language of the law, I have clients this evening, and those clients are the junior members of the medical profession. Now, it would be affectation in me to assume, even for form's sake, that a tithe of my present audience are in the category of medical students. Perfectly conscious that my clients are this evening (and for this night only of the session) in the minority, nevertheless, I candidly own, that to them duty compels me to give undivided attention. No other course is open to me, therefore, than to throw myself frankly (which I do with the most entire confidence) on the kind indulgence of the *seniors*, and to entreat their patient hearing, while I offer a brief sketch of the *duties*, the *responsibilities*, the *advantages*, and the *prospects* of the junior portion of my audience.

We are met to inaugurate the medical session of 1850-51. Music, if summoned to our aid, would have hailed your entrance, Mr. Treasurer, with the spirited strain of Dr. Baillie's talented sister:—

"Uprouse ye all! It is our Opening Day."

We are met to welcome, in military phraseology to swear in, the recruits who this day join our ranks; and, with language of encouragement, to speed on their course those who have already made some progress in their educational career. With this day begins the pleasing but responsible task of teaching the young professional "idea how to shoot;" of giving to the intellectual branch its first inclination in the right direction. We commence, on this day, to *instil* into the minds of the youthful aspirants to medical honours, those first principles which are to guide them through life, remembering always the sound old Roman maxim, "*That the cask retains, to the last, some portion of that fragrance with which it is first imbued.*"—"Quo semel est imbuta recens, servabit odorem Testa diu!"

They in whose honour we are now assembled, come to us, after having completed that preliminary course of education which is so essential to all who are to work their way in *any* honourable calling or profession, but more especially in a calling pre-eminently *liberal*. They have, doubtless, made themselves acquainted with one, if not both of the languages of antiquity. The eloquence of Cicero, the flowing periods of Sallust, the refined poetry of Ovid and Virgil, are, it may be presumed, familiar to them. They have acquired, I hope, some elementary knowledge of mathematics, so requisite for all who would think deeply and reason correctly. They have studied the history of their own country, and of those great political changes here and abroad, which have preceded our times. It is not unreasonable to presume still further, that they have learned one at least of the languages of continental Europe; and by these several means have prepared and dressed the ground in which the seed of medical instruction is now to be sown.

Having done this, and "*having the world all before them where to choose,*" they have made choice of *Medicine* for their profession. From among the many schools with which England abounds they have selected *St. Thomas's* in the borough as the immediate field of their labours. It shall be part of my duty to show these young men that they have not acted unwisely either in the *principle* of their choice, or in its *practical* application.

I am sure I am doing them no more than common justice when I assume, that their first sentiment this day will be one of surprise at the extent of public interest taken in this, *Act first, scene first*, of the medical drama. The rising curtain displays to their view, not the cold simplicity and naked walls of an ordinary lecture-room, but the noble hall of this time-honoured institution, dazzling the eye by the splendour of its illumination, and cheering the heart *by a countless array of names and figures*, which bespeak alike the unbounded wealth of former ages, and the noble uses to which that wealth was applied. They find the audience consisting not of fellow-pupils only, but of the governors and authorities of the hospital, of civic dignitaries, lawyers, soldiers, merchants, heads of the profession, and men eminent in their respective vocations. It cannot be supposed, by the least enlightened among them, that all this is the effect of *accident*. They cannot believe, that either caprice, or fashion, or curiosity, has brought together such an assemblage as this. "Oh, no!" as one of our lyric poets says,

"It is something more exquisite still."

It is a feeling akin to that which prompted the wise man of old when he wrote "Honour the physician with the honour due unto him; give place to the physician, for the Lord has created him!" That sentiment, old as the Bible, finds a response in all ages, an echo in *every* bosom. It is *that* feeling, unchanging and unchangeable, which has filled this hall on this occasion, and which will continue annually to fill it, so long as the profession of physic ministers, *in a scientific spirit*, to the wants and necessities of mankind.

I say, in a *scientific spirit*—for, gentlemen, in choosing medicine for your pursuit, you have chosen a *learned* pro-

fession—a profession honoured in all countries, in all ranks and grades of society. If a man wishes to travel in the far East, his best passport is the garb of the physician. When one of the most talented men now at the English bar undertook to write a book which should be universally popular, he did not write the Diary of a Lawyer. He knew the world better;—he wrote the "Diary of a Physician." Nor is this favourable bias towards medical pursuits confined to the *reading* classes of society. You will find the lowest orders of people in this country often asking permission to be present at dissections,—and this, observe, not from idle curiosity, but because they know, from high authority, that "they are fearfully and wonderfully made!"

Good management may keep men out of the hands of the lawyer, but no care can prevent the occasional visits of the doctor. In the advance of medical science, therefore, all are interested.

There are comparatively but few people in this world who trust their own lives, or the lives of those near and dear to them, to the tender mercies of men who profess to have discovered a short and expeditious road to medical knowledge. Some such there are undoubtedly, and England has been called (perhaps deservedly) the "Paradise of Quacks." The mass of mankind, however, even here, are fully alive to the fact that, in the long run, success in medicine can be attained only by the devotion (aye, and the *steady* devotion too) of a *life* to the pursuit. They feel and know that medicine is an advancing science, that its foundations, deep as they are, are still constantly deepening, and the sphere of its influence, wide as it is, still annually widening.

While I thus impress upon you, my junior auditors, the high pretensions of that pursuit which is to be the occupation of your lives, I do not wish to conceal from you the difficulties attending the choice you have made. It was one of the favourite tricks of the elfin spirits of old, to entice a man into the middle of a swamp, and there, ungenerously, to leave him. I will do you no such injustice. If, hereafter, you do encounter trials and difficulties, you shall meet them *forewarned*, and, if truth be in the proverb, *forearmed*.

You will understand, then, that the profession of your choice carries with it, even from the very first, no small amount of labour,—that it makes heavy calls upon your stock of patience,—that the student of this year has something to learn beyond that which was demanded of his predecessor. For three long years you must study diligently, eschewing ordinary amusements,—forswearing the theatre, bidding adieu to the casino, deserting the ball-room, shunning the billiard-table,—devoting your *whole* time to the lecture-room, the dissecting-table, the chemical laboratory, private study, and the wards of the hospital. The structure of the human body, the healthy actions of the human body, the disordered conditions of the body, the injuries to which it is subject, must each, in turn, become the objects of your thought: you must investigate the nature and operation of those *drugs* which Nature has mercifully furnished for the relief of human suffering, and the means which human ingenuity has devised for the repair of accidental injuries.

At length, however, comes the period of your "*emancipation.*" I will assume (and experience permits me to assume) that you have made good use of those three years,—that you have done credit to your teachers,—that you have emerged with honour from your examinations,—that the governors of this hospital have acknowledged your merit,—and that your incipient library now displays many splendidly bound volumes,—the first fruits of your literary labours.

And now, then, you are prepared—for what? For a life of ease?—for the pleasing pastime of filling your purses with Californian facility? Far otherwise! You will have prepared yourselves for a life which, under all contingencies of fortune, necessitates incessant toil, under many and trying difficulties. You have prepared yourselves for a profession which entails a heavy load of responsibility, many an anxious hour, many a sleepless night, many moments of regret, many occasions of heavy disappointment. You will often have to toil without obtaining your just reward, to labour without reaping your harvest. Instead of the warm acknowledgment to which you are fairly entitled, you may, perhaps, meet only with a cold and heartless ingratitude. Poor-law guardians may cut down your salary, and Poor-law commissioners sanction the economy.

These, and a thousand like hardships, await, with unerring certainty, the man who chooses medicine for his profession, and for all these you must arm yourselves accordingly. You must take the shield of patience, and put on a panoply of good humour. An approving conscience must often stand in lieu of a fee.

Let me not, however, utterly discourage you. Every coin has a reverse face,—every picture has a bright as well as a dark side; nor will I withhold from you the agreeable anticipation!

"When pain and anguish wring the brow"

you will always be welcome visiters. You may—perhaps early in your career, but very certainly in the end—find your labours duly acknowledged, honourably appreciated, fairly, perhaps munificently, rewarded. Your position in society will certainly be good,—possibly distinguished! Respected by all, your days may be passed in a ceaseless round of useful occupation,—tasting, not more in the abode of wealth than in the cottage of the peasant, the inconceivable

"Luxury of doing good."

This is a plain unexaggerated picture of the profession which you have chosen. This is the sort of chequered career on which a certain number of you now standing before me are this day to enter. You enter on it under circumstances very different from those of your predecessors! Advantages are open to you, not so much as dreamed of a few years ago! Opportunities of advancement lie in your path unimagined by those who preceded you. It is really quite necessary that you should feel and fully appreciate the nature and extent of the advantages which you possess, and of which, I trust, you will so largely avail yourselves. It shall be my object to explain them to you. For this purpose I must lay before you with all the brevity consistent with clearness, a sketch of the "History of Medical Education." I must explain to you the origin and gradual development of the educational establishments of our profession, and show you by what slow degrees those of London have attained their present position. I must inform you how far you stand indebted for such benefits to colleges and halls,—how much is due to the fostering care of a paternal government,—how far you owe obligations to the liberality, wisdom, and public spirit of the governors of the noble institution within whose walls you stand, and which, for some years to come, is to be your home. When I have done this, I will throw out a few suggestions as to your future prospects, and the *position* which you are ultimately to assume; on the best means which can be adopted, in these critical times, to uphold the dignity of that art and mystery which we profess to teach you; to cherish a good understanding among all who engage in it, by whatsoever designation they are known, and to allay that prevailing spirit of dissension, which is not only discreditable to us as a body, but specially disastrous to the cause of medical education.

That medicine should, in all barbarous ages, be little esteemed, and scarcely, if at all, cultivated; that a long period of empiricism should, in all countries, precede the scientific study of medicine, is what might reasonably have been anticipated. It is greatly, therefore, to the honour of Greece, that there, at a very early period, medicine should have been cultivated with success, and held in esteem by the people. Homer mentions, with due respect, Machaon and Podalirius, staff-surgeons of the Greek army at the siege of Troy. These gentlemen, sons of Æsculapius, doubtless received their education under their father's roof. For many succeeding ages medicine was practised exclusively by the descendants of Æsculapius. These men, yclept Asclepiades, were *priests*, and guardians of the various temples erected in honour of Æsculapius throughout Greece and the Grecian Archipelago. To these temples the sick repaired, as to hospitals, and received such advice as routine practice dictated. The custom which then prevailed, of depositing votive tablets on occasion of any remarkable cure, afforded certain facilities to the student of these primeval times. Those tablets recorded the symptoms of the disease and the method of cure adopted. Such was the origin of *clinical instruction* in medicine—such were the first "*reports of cases.*"

You will perceive that medical men were instructed in those days, as shoemakers, tailors, and gardeners learn their handicrafts in modern times,—by what is called the system of apprenticeship,—A teaching B, B teaching C, and so on throughout the professional alphabet. But the time was approaching when this, to say the least, most imperfect system of medical education was, in a certain degree, to be superseded.

The eighteenth in lineal descent from Æsculapius, was a man who towered above his predecessors and contemporaries in so remarkable a manner, that he is justly styled the father of scientific medicine. I need hardly tell you, that his name was Hippocrates. He was educated by the Asclepiades of the Temple of Cos. His immediate master was Herodicus.

He inherited from his great ancestor a natural genius for medicine. The intellectual heritage of eighteen generations seems, indeed, to have centred in him. His mind was of that cast singularly adapted to this branch of physical science. Devotion to his hereditary calling was, in him, associated with extraordinary freedom from early prejudices, with the most untiring industry, with great acuteness of intellect, the highest moral integrity, and the most liberal feelings. He practised medicine "*like a fine old* Grecian *gentleman.*" He it was who gave to physic that commanding position among the liberal sciences, from which it has never yet receded, and from which, I trust, neither the pseudo-science of *Hahnemann*, nor the *palpable* quackeries of *any other man*, will be able to dislodge it.

The writings of Hippocrates extend over every branch of medical knowledge. He was both a physician, surgeon, and accoucheur. His theoretical and practical knowledge on each of these subjects were alike remarkable. Those writings opened a new and far better mode of acquiring a knowledge of medicine than the tablets of temples and the amulets of a cunning priesthood. Accordingly, the aspirant to medical honours, whether physician or surgeon, now betook himself to the study of Hippocrates, and, for many years, of Hippocrates only. In course of time came Galen, a disciple, like the rest of the world, of Hippocrates, but very far from rivalling his master :—

"Proximus—sed longo intervallo."

These shining lights of Grecian medicine—Hippocrates and Galen—were "followed, flattered, sought, and sued" by successive generations of doctors for many hundred years. Private study became now the great staple of medical education. Over the pages of Hippocrates the student consumed his midnight oil; and such was the devotion of pupil to master in those days, that one physician is recorded in history, who made it his boast, that he would rather be wrong with Galen than right with any other man.

Medical science owes little or nothing to Rome. The Romans imported a few Greek doctors, but held them in low esteem. In the ages succeeding the fall of their great empire, science took refuge in Egypt. Alexandria, owing to its splendid library, became the chief school of medical learning throughout the world, and the Christian was then taught his lesson by the Saracen! The puerilities of Rhazes and Avicenna were now superadded to the sounder doctrines of Hippocrates and Galen. The cause of science suffered; but we must not overlook the obligations due to the Arabian professors of medicine. For the long period of 400 years, when the rest of the world was in darkness, they fanned, with vestal virtue, the flickering flame of medical learning, until the dawn of that brighter era, when the study of medicine rose into its legitimate importance.

Europe had by this time settled down into those political relations which still subsist; and about the same period which witnessed the conquest of England by William of Normandy, there was established at Salerno, a seaport town on the coast of Naples, a regular medical school, the first of which history makes mention. The system of teaching by lectures was now introduced. Physicians gave lessons in Greek and Arabian medicine. Such was the high reputation of the school, that Robert of Normandy, son of William the Conqueror, remained here on his return from Palestine, for the benefit of the best surgical advice which Europe then afforded. The University of Salerno merits special notice on another account. Here it was where diplomas in physic were first granted. The examination was in Galen, Hippocrates, and Avicenna. The candidate was required to be twenty-one years of age, and to have been engaged for seven years in general and professional study. The Medical School of Salerno maintained its reputation for nearly two centuries.

The good example thus set was not lost upon other countries. Montpellier took the lead; and there, in the 13th century, a medical school was established, which preserved a high character for many ages. Bologna was at first her rival, and, for a brief period, a successful competitor. Medical lectures were then read in other great Italian towns, especially Rome and Padua. Shortly afterwards, Paris and Vienna became celebrated as schools of medicine. In 1526, the University of Basle, in Switzerland, rose into eminence; and multitudes flocked thither, to hear Paracelsus declaiming against Hippocrates and Galen. Late in the 15th century, Linacre, an Oxford student, repaired to Italy to study medicine. On his return, he himself read lectures on physic at Oxford; and, in 1518, obtained, by his influence with Henry VIII., the charter which founded a college of physicians in London.

Regular medical education in England may be dated from this epoch; though for many years afterwards it was the settled custom for all English physicians and surgeons of eminence to repair to some continental school for the chief part of their professional knowledge. The reputation of Ambrose Paré gave to Paris a high character as a school of surgery. Sydenham, in 1660, selected Montpellier as the scene of his educational labours. Padua and Pavia, however, were the chief seats of medical learning during the 17th century. Then and there it was that the value of practical anatomy as the basis of medical instruction was first acknowledged. There flourished Fallopius, Vesalius, Eustachius, and others, whose names are indissolubly associated with anatomical science. There it was where Harvey studied, and from the lectures of Fabricius drew his first magnificent idea of cardiac physiology. In the early part of the 18th century, Sauvages rekindled the fame of Montpellier; but the deep researches of Ruysch and Lewenhock, the genius of Boerhaave, and the wide-spread reputation of his pupil, Gaubius, had by this time transferred to Holland the high honours which Italy had hitherto monopolised, and Leyden became the focus of medical education from the year 1700 to 1770.

The College of Physicians of London, during the first two centuries of its existence, had not been indifferent to the question of medical education. The first step was taken by Lord Lumley, who, in conjunction with Dr. Caldwell, endowed, in 1581, (sixty-three years after the foundation of the college,) the lectures, now known as the Lumleian, on anatomy and surgery. In 1615, Harvey, then thirty-seven years of age, was appointed Lumleian lecturer; and in the course of those lectures first promulgated his great doctrine of the circulation of the blood.

In 1632, Dr. Gulston endowed the lectureship which still bears his name, the object of the lecture being to illustrate three or more diseases, as to the college authorities might seem expedient. In 1729, Lady Sadleir, widow of Dr. W. Croone, who was a fellow of the college in 1677, founded the lectureship known by the name of "Croonian." These three endowed lectureships still annually contribute to the diffusion of medical knowledge in this town.

The fellows of the College of Physicians became the physicians of the seven great metropolitan hospitals—enjoying pretty nearly to my own time a monopoly of those high appointments. Harvey was physician at St. Bartholomew's; Mead at this hospital. Mead was appointed, by the incorporation of surgeons, to deliver anatomical lectures in their hall; and he forms one link in that chain of physicians who, from the days of Harvey to Mathew Baillie, were, though not the sole, yet the chief teachers of anatomy in this country.

London was not, however, yet a school of medicine. To the fame of the University of Leyden succeeded that of Edinburgh. As a seat of general literature, Edinburgh had been favourably known for more than a century; but it was not until 1770, when irradiated by the united genius of Cullen, Black, Monro, senior and junior, and my own honoured grandfather, John Gregory, that it shone forth with such extraordinary lustre, as the chief seat of medical education, not in these realms only, but throughout Europe. In any enumeration of names distinguished as medical teachers in Scotland, I must not fail to record that of another relative, James Gregory, the author of the "Conspectus Medicinæ Theoreticæ,"—a work which, to all medical students, the regulations of Apothecaries' Hall have made "familiar as household words." To the merits of my uncle and early master as a teacher of physiology, pathology, and clinical medicine, all who ever heard him bear a willing and a grateful testimony. Those who had not that good fortune will easily appreciate ours, while perusing the Physiological Lessons which he has clothed in such simple but classical Latinity. The great merit of Edinburgh, as a school of medicine, consisted in the prominence there given to clinical

instruction, and the admirable manner in which that department of medical education was conducted.

For fully half a century, Edinburgh reigned supreme and unquestioned in all matters connected with medical education. Thither flocked the learned from Oxford, the studious from America, the industrious from Switzerland, receiving and diffusing through the world a genuine enthusiasm for medical science. But the strangers who thus resorted to Scotland were chiefly those destined to practise, in after life, as physicians. It is time that we inquire how, while all this was taking place in Scotland, and on the Continent, the mass of English practitioners were prepared for their arduous duties?

When the College of Physicians was established, in 1518, this country swarmed with illiterate pretenders to medical learning. The preamble to the Act 3 Henry VIII., cap. 2 (1511) recites, that "both physic and surgery (to the perfect knowledge wherof both great learning and ripe experience are requisite) are daily exercised within this realm by a multitude of ignorant persons, some of whom cannot even read; so that common artificers, smiths, weavers, and women boldly and accustomably take upon them great cures, in the which they partly use sorcery and witchcraft, partly apply such medicines as be very noxious, to the great destruction of those of the King's lieges who cannot discern the cunning from the uncunning."

There was some excuse, however, to be made for the King's lieges in those days; for the preamble of another Act, passed in the 34th Henry VIII., cap. 8, (1542,) recites, that "most of the craft of surgeons have small learning; yet will they take great sums of money, and do little for it;" the result being, that "many persons do rot and perish to death for lack of help of surgery." To meet this deficiency, the Act expressly permits "honest persons, not being surgeons, whom God hath endowed with a knowledge of the nature of herbs, roots, and waters, to use and minister the same in cases of burns, scalds, sore eyes, ague, the stone, and such other like diseases, according to their cunning, knowledge, and experience in any of the sores and maladies aforesaid."

Here you see an Act of Parliament countenancing that "intuitive knowledge of medicine" which has been claimed by certain parties in all ages, and which, I grieve to say, not only is claimed, but even finds favour, in high quarters, in our times.

There existed, in those days, two companies or incorporations of surgeons; the first, claiming to have been enfranchised "from the time that no record is to the contrary;" the second, or barber-surgeons, incorporated by Edward IV., in 1462. Henry VIII. united these into one Company, by an Act passed in 1540.

The preamble to this Act is quite explicit, as to the surgical education of those days. It is in these words:—"Forasmuch as there be abiding in the City of London, men of great experience, as well in speculation as in the practice of the science and faculty of surgery, *under whom many expert persons are brought up as their servants and apprentices, who*, by the diligent information of the said masters, exercise the said science in divers other parts of this realm," therefore, &c. Apprenticeship, then, you will perceive, was exclusively the education of the general practitioners of England in the time of Queen Elizabeth; and so it continued till nearly the middle of the last century. The advance of knowledge had, by this time, rendered necessary the severance of the *surgeons* from their Siamese brethren the *barbers*, for which great measure of practical reform we stand indebted to George II. in 1745.

In those days, and down to so late a period as 1814, there was no law whatever in England enforcing medical education on the general practitioner,—or apothecary, as he was called. Any one, whether educated or not, might practise as an apothecary, there being no check whatever on the assumption of the title, no examination, no necessity for such a person knowing more than to read and write. Custom, however, in some degree, took the place of law. The greater portion of the young apprentices throughout England came to London, and, as the phrase ran, *walked the hospitals*. They followed Cheselden at this hospital, Pott at St. Bartholomew's, John Hunter at St. George's; and a certain number submitted voluntarily to examination before the newly organised incorporation of surgeons.

In 1800 this incorporation became, by charter of George III., a Royal College, and the demand for diplomas rapidly increased. Let me take three epochs. In the first five years, (April 3, 1800, to December 31, 1804, inclusive,) the college issued diplomas to 683 pupils, being at the rate of 133 per annum. In the second epoch (1815 to 1819 inclusive) the total number of diplomas granted by the college had advanced to 1435, being at the rate of 287 per annum. In the third epoch, (1840 to 1844 inclusive) the total number of surgical diplomas issued was 2763, being an annual average of 555;—

"And the cry is still they come."

From this statement, you may form some judgment of the estimation in which the diploma of the Royal College of Surgeons is held throughout the length and breadth of this land!

For many years, and even in my own early days, anatomy and surgery occupied almost exclusively the attention of London students. The reason is obvious. The sole examination was by the College of Surgeons. The pupil usually attended (or rather yawned over) one encyclopædial lecturer on *medicine* for three, or it may be six months. I can remember Sir George Tuthill lecturing single-handed on the Theory and Practice of Medicine, Chemistry, Materia Medica, and Botany, and all between the hours of 8 and 10 in the morning! So little was medicine then thought of in London, that, in 1814, the *total* number of pupils attending the physicians' practice in the seven metropolitan hospitals, was only thirty-eight! At this hospital, there was one physician's pupil; at the Middlesex Hospital, one; at the London and Westminster Hospitals, *none!*

Eighteen years afterwards, viz., in 1832, the number attending physicians' practice at this hospital alone, was *eighty-six!* Total in the seven metropolitan hospitals, 326! Last year, the total number of pupils receiving medical education in London was between 900 and 1000; each of whom, at some period of his education, attends the *medical practice of an hospital*. The change in medical education thus brought about in the short space of thirty-five years, is immense, and the cause of so extraordinary a movement merits attention.

In 1617, James I. founded the *Worshipful Society of Apothecaries*. The privilege granted to this body was *to make ordinances concerning medicines and compositions, "and to advise respecting the same with the President and Censors of the Royal College of Physicians."* The society never was a large one. In 1815, the gentlemen enrolled in this corporation, whether by purchase, servitude, or patrimony, did not exceed 400. The terms of admission show that the society was not originally designed to take a high rank in science. The examination consisted in naming a few drugs shown on a tray. The member took an oath to be faithful to the King, and obedient, in all lawful matters, to the master and wardens of the society. The society drove a very lucrative trade in drugs, and was, in 1812, to all intents and purposes, a trading corporation.

In 1813, the laxity of discipline in the medical schools of London had reached a pass which was no longer endurable. It became essential to place medical instruction in England on a proper basis. The Colleges of Physicians and Surgeons were, as a matter of course, applied to, and urgently entreated to undertake the supervision of medical education. The selection of such a depository of power was most honourable to the proposers. But, strange to say, the College of Physicians, (on whom the duty seemed most naturally to devolve,) with a recklessness of consequences, which to us, at this time of day, is absolutely incomprehensible, spurned the proffered privilege; and the College of Surgeons showed as little inclination to extend their sphere of usefulness.

Driven from the colleges, a resource was found in King James's Worshipful Company of Apothecaries. To them Parliament assigned the honourable office of *regulating* and *testing* the education of the great bulk of the medical practitioners throughout England and Wales. The *teachers* were, with few exceptions, members of the Colleges of Physicians and Surgeons, but the control of the medical curriculum, *in all its details*, was exclusively in the hands of a society framed and chartered for the supply of drugs! We may be permitted, for one moment, to figure to ourselves what would have been the state of the medical profession in this country at this time, if the College of Physicians, in 1815, had, with the liberality which now characterises all its measures, proffered the right hand of fellowship to the general practitioners, adopted them as "*associates*"

of the college, and thus given unity, and, with unity, strength and influence, to the profession!

Regret at opportunities thus unhappily lost, never, I fear, to be recovered, must not blind us to the merits of those who undertook the difficult task which physicians rejected, and surgeons repudiated. The Society of Apothecaries has exercised the powers which the Act of 1815 conferred, with an energy and success which challenge the gratitude of every friend of the medical profession,—a gratitude heightened by the readiness so generously expressed to renounce their superadded dignity, if the general voice of the profession should concur in opinion that medical education would be thereby improved, and the interests of the profession better secured. Conduct such as this needs no comment from me to command your unqualified admiration!

The unceasing efforts of the Society of Apothecaries,—the force of public opinion, fostered by the long continuance of peace, and its natural result—concentration on matters of domestic interest—and, lastly, the establishment, in 1837, of the University of London—have forced forwards, with rapid strides, the march of medical education throughout England. Medical schools have been established in nine of the principal towns of England, where a sound professional education may be obtained. The metropolitan schools are become—some in name, all in effect—colleges, which annually usher into the world men fully educated, and competent (so far as education *can* render men competent) to undertake effectively every branch of medical practice.

Nor can I omit a passing allusion to the stimulus given, in our own times, to medical education, by the establishment of an efficient *Army Medical Board*. The military surgeons attending Henry V.'s army at the battle of Agincourt in 1415, were drafted from civil life. They were treated like camp-followers, and frequently received less pay than drummers and fifers. From the earliest periods of the *regular* British Army (1660), down to nearly the close of the last century, the regimental surgeoncy was, in a great measure, in the patronage of the colonel. Surgeoncies were purchasable, like other commissions. In 1764, the price of a surgeoncy was 650*l*. No security existed that the surgeon of a regiment had undergone a proper education, or that he was competent to do his duty. The first Board of Military Medical Supervision was instituted in 1756, by the Duke of Cumberland, (of Culloden notoriety,) but it was very inefficient. A new Medical Board was formed in 1793, but this also gave little satisfaction. It was remodelled on nearly its present basis in 1810; since which time the education of the army medical officer has been strictly enforced,—an improvement, the full development of which constitutes one of the many claims which Sir James M'Grigor has earned on the gratitude of posterity.

The governors of St. Thomas's Hospital, watching the signs of the times, and anxious that the great resources of this ancient establishment should be turned to the best account, have, with a liberality and judgment alike creditable to them, done all that in them lies to foster and encourage the prevailing spirit of improvement in medical education. In their zeal they have even gone beyond the actual requirements of the law, and have here accumulated educational appliances, not exceeded by those of any medical school of London, and infinitely in advance of those which, fifty years ago, were thought fully adequate for the instruction of *physicians* in the University of Edinburgh. Eight separate courses of lectures were delivered in Edinburgh in 1800, the curriculum being spread over three years. Three years' attendance is now required in London; and in this school, during the ensuing session, thirteen distinct courses of medical instruction will be delivered,—namely, descriptive anatomy, comparative anatomy, physiology, pathology, chemistry, botany, materia medica, forensic medicine, practice of medicine, exanthematic medicine, surgery, ophthalmology, and midwifery. Besides which, the pupil is supplied abundantly with those means of acquiring a practical acquaintance with his profession, which oral instruction alone fails to afford, and which it is the boast of modern times to have raised into importance. Clinical medicine, clinical surgery, anatomical and microscopical demonstrations, the chemical laboratory, and the dissecting-room, healthy and morbid, furnish forth such facilities.

A preliminary or matriculating examination tests the proficiency of the pupil in those branches of general knowledge which are so essential to the formation of character, and to the profitable digestion of the educational banquet here so abundantly provided. Sessional examinations by the several teachers stimulate the diligence of the pupil. A *collegiate system* of discipline, superintended by the Dean of Faculty, gives to this school advantages for study, akin to those which are the pride of our old universities, and the best legacy of the monastic system.

But the zeal of the Governors of St. Thomas's Hospital does not stop short with furnishing to the student the *means* of education. Conscious as they are that industry, like every other virtue, brings with it its own best reward, they nevertheless superadd inducements of no mean character to rouse emulation and stimulate exertion. The rewards of diligence here offered to the pupil may challenge competition with those of any school in any country. The privileges of dressership and house-surgeoncy, once at the command of wealth, can now be purchased only by knowledge and industry. Prizes are awarded in every department of study. The treasurer of the hospital displays equal liberality and judgment in awarding the highest of these prizes to him whose general conduct throughout the session has been most meritorious. In the distance looms his still nobler reward for the exercise of original thought in those whose *early* training has been in this school. Individual governors have been found, not less zealous, scarcely less liberal than the treasurer, whose generosity offers additional stimulus to the student's exertion. Science is summoned to honour the *commencement* of the pupil's labours, while rank, fashion, and beauty give grace and lustre to their close!

On the merits of those to whom is confided the responsible office of teachers, it would ill become me to enlarge. Nevertheless, addressing as I do so many who are strangers to this hospital, it is really due to the discernment of the governors to say, that in several instances their judgment has been ratified by no mean authority. When the members of the Royal Academy desired the assistance of one whose anatomical knowledge, refined taste, learning, and eloquence, might foster genius in the rising artist, they found what they sought among the teachers of this school. To this school came the Government when they desired the services of one who might curb the ravages of pestilence, and aid what may emphatically be called the "*grave*" deliberations of the Board of Health. To St. Thomas's Hospital came the civic authorities of London, when they required a guide and counsellor in questions of sanitary improvement.

The examples of such men, the prospect of such high rewards, will not, I am sure, be suffered by the pupils of this hospital "*to waste their sweetness on the desert air.*" I anticipate from them during the ensuing session that amount of industry, and that steadiness of deportment, which will evince at once their sense of the responsibilities they are preparing to undertake, and their just appreciation of the generous welcome which has met them here this evening. If they will give to science their undivided allegiance, I will venture to ensure them, in return, ample interest, in the shape of honour, rewards, credit, friendship, and patronage.

But the parents and guardians of our young friends may, not unreasonably, look somewhat closer into results. They may inquire, what is to be the future position of the student of 1850? If so much more be expected from *him* than was required from the student of 1815, if his education is to be made thus *complete*, what corresponding advantages will he reap? Taught, as he will be, to look up with reverence to Sydenham, Baillie, Hunter, Lawrence, Green, and Brodie, is he to tread in their footsteps? Are the students of the present day to be *separated* hereafter from the learned associations in which their *masters* are enrolled, or are they to be *incorporated* with them, benefiting by the prestige attaching to their names, and with them

"To swell the triumph and partake the gale?"

A reply to such questions can hardly be thought unsuitable to the design of this address. Medical reform is essentially an *educational* question. At any rate, it is too intimately *mixed up* with medical education to permit that I pass it by altogether; but I shall review it in no party spirit. I desire only to show how it bears on the prospects of *those* whose welfare brings us together on the 1st of October in each successive year. It is not for me to anticipate the results of Parliamentary wisdom. I indulge no hope of solving that problem which an able Minister of the Crown has almost abandoned in despair. I cannot reasonably expect to settle a question which has agitated men's minds for the long period of fifteen years, which seems to grow in

difficulty with each successive year, and more and more to elude our grasp. But the historical retrospect of medical education which I have taken, may furnish some useful hints towards a solution of the difficulty. If it does not show what is practically attainable, it may at least suggest what is theoretically desirable.

The experience of 2000 years, then, has been thrown away, if we do not gather from it that medicine is one faculty, and that the same education is required for all who are to make it their profession, whatever rank or position they may ultimately assume. This teaches us, that, whatever be the new scheme of medical polity, the arrangements for medical study can never be allowed to emanate from one college or one hall, but must flow from the united wisdom of all those colleges and incorporations which the Crown may please to charter, and Parliament think fit to sanction.

Our retrospect next tells us, that from the earliest periods mankind have practically acknowledged the one broad line of distinction which nature has drawn between external injury and internal malady. Physic and surgery, however, are the only divisions of our profession which *are* admitted in *other* countries, and *have* been admitted in other ages. In fact—

> "The force of *Nature* can no further go;
> To make a third, she joins the former two!"

Now, whether the clouds which darken the professional horizon will be dispersed by the endowment of a college composed *exclusively* of general practitioners—whether the desired end will be gained by remodelling one or more of the existing institutions—whether, lastly, the object so long sought may be found in a practical application of Dryden's lines just quoted, and the establishment of a third college, —the United College of Physicians and Surgeons—by the combination and extension of certain elements of the existing two,—time alone can reveal; but there are three results of recent experience which no government or legislature can safely neglect.

In the first place, it is quite clear that we have outlived the system of apprenticeship; the knell of that ancient system has been rung! No one will for a moment hesitate to admit, that a *portion* of the student's time may profitably be devoted to rudimental pharmacy; but the day has gone by which attached importance to the legal obligation of an indenture, and when men withheld all admission of merit

> "Till red wax and green ferret
> Were fixed to the foot of the deed."

Henceforth there can be but one opinion as to the necessity of devoting the early years of the youth destined for medicine to the acquisition of general knowledge. In no profession more certainly than in ours may it be said,

> "A little learning is a dangerous thing;—
> Drink deep, or taste not the Pierian spring."

A decree has gone forth, that no gentleman shall be permitted to devote his life to the *military* service of his country who cannot pass an examination in Euclid, algebra, logarithms, geography, and history; and surely that which the Duke of Wellington deems essential in the ensign of a marching regiment, is pre-eminently required in the cultivator of medical science.

Secondly, the old colleges will do well to remember the vast difference between the medical education of 1815 and that of 1850. I have heard it hinted, (by those in authority too,) that the annual demands of society in this country could not be met, if a high standard of medical education and a very stringent examination were insisted on; but the experience of this and of other schools may be accepted as proof that the energies of the medical student, particularly under a good system of preparatory instruction, have been underrated; and that, ultimately, they will be found fully commensurate with any demands which the colleges may think fit to make upon them.

A lesson not less instructive is held out, thirdly, to those who would innovate the most largely upon existing institutions. *They* should reflect, that the pupils who last year *voluntarily* submitted to examination before the College of *Surgeons* equalled in number, *even if they did not actually exceed*, those whom the requirements of the law compelled to appear at Apothecaries' Hall; nor can any reasonable doubt be entertained, that if the College of Physicians were now, at the eleventh hour, to hold out the prospect of a like honorary examination and diploma, the general practitioners of England would there also voluntarily enrol themselves! So universal is the cherished sentiment of chivalry —"*Fortes creantur fortibus.*"

Gentlemen, the crisis of medical reform approaches. Parliament and Government seem now alike desirous to do justice to the medical profession. In every quarter we may trace the harbingers of better days. To our brethren in military life has been accorded a participation in those honours to which their courage in the field and their professional skill alike entitle them. Our brethren in the navy (the least enviable section of the profession) have, after a hard struggle, obtained a recognition of their just but humble claims. The Legislature has already evinced its willingness to engage in that great work which shall unite that rope of sand (the physicians, surgeons, and general practitioners scattered throughout this empire) into great brotherhoods, animated by one sentiment, and co-operating in one great and harmonious design. All that is wanting is, that the arm of Government, now paralysed by our internal divisions, should be free to act; and that the several classes of the profession should sink all minor differences in the one absorbing consideration,—how we may best secure the future interests of those who are now entering the pale of physic!

High as these aspirations may appear, they will ere long be realised, and then one brilliant vision of the future will alone remain to be fulfilled; but that one carries with it the key-stone to the arch of medical ambition!

The eye of Government is ever directed to our sister professions, and talent displayed in the church, or in the law, is quickly detected and appropriately rewarded. Let us indulge the hope, that a like supervision will one day be extended to medicine. Hitherto, in our profession, talent which, devoted to the bar, would have *ensured* elevation to the bench,—learning and piety which, in the church, would as certainly have achieved lawn sleeves, remain as though unworthy of national acknowledgment. The badge of military honour adorns, and justly adorns, the breast of the soldier, but no such costless but envied proof of national gratitude spurs the ambition or proclaims the merit of the accomplished physician or surgeon.

We need not, however, despair. The first step towards so high an object was taken when medical education throughout this country was placed on a suitable basis. In proportion as medical education is improved and extended, in the exact same ratio shall we rise in the esteem of men, so as ultimately to secure for all, from the court physician to the surgeon of a Poor-law Union, that consideration, and those honourable testimonials, which are due from the nation to science, when it dedicates itself for life to the service of humanity!

HUNTERIAN SCHOOL OF MEDICINE.

By C. J. B. ALDIS, M.D., M.A., Cantab.
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS.

Gentlemen,—The commencement of each winter session naturally revives thoughts of former days in the minds of numerous medical practitioners. Some bring their sons to be educated in the same schools were they receive instruction, curiosity attracts others to their Alma Mater, while many enjoy a short reverie, forget their age, and imagine themselves students. There is everything to encourage such a dream, young men ready to begin their studies, others anxious to advance in them, and many to complete their qualifications.

A contemplation of the history of medicine would, no doubt, be instructive, but the time allotted to me is too short to allow of my saying much respecting it; I would, then, rather refer you to the works written on the subject. We might conjure up the illustrious dead, from the Egyptian priests to Harvey, and dwell upon the different periods of medical history, the primitive period, or period of instinct; secondly, the sacred period; thirdly, the philosophical period, in which the Alexandrian school was founded, 320 years before Christ, when anatomy first received attention.

It was followed by the Greek period, from which science passed over to the Arabian period. As learning revived, medical science revived, which ended in another period, including the 17th and 18th centuries. (a)

(a) Vide Friend's History of Physic; Renouard's "History of Medicine;" and *British and Foreign Medical Review*, Vol. XXIII.

At the delivery of my last Introductory Address, two years ago, I referred to the great effort which was made for promoting education, by the establishment of evening classes for young men desirous of improving their leisure hours at the lowest possible expense. A new society was to be established that very evening, and I am happy to say that no less than 25,000 attendances had been the result. I alluded to this circumstance, with a view to stimulate students to obtain, if possible, a good preliminary education before entering upon their medical studies; for others in an inferior station of life might outstrip them in general information; and, according to Hippocrates, "art is long, life is short, opportunities rare, experience deceitful, judgment difficult." Medicine aims at the preservation of health and cure of disease. Hence the necessity of exerting our reasoning powers, and the advantage of much human knowledge to carry out its objects. The priest first practised medicine, regarding not only the eternal but also the physical condition of mankind. A very different state of things exists in the present day—the minister of religion and the medical practitioner are, in too many instances, quite disunited. This separation became requisite in regard to the actual practice of the healing art, in consequence of the great improvement which has taken place in that science, but a greater sympathy might exist between the two co-operating together much more than they do in the present day, which would terminate in the greatest possible benefit to mankind. You will be called upon to attend the poor as well as others in a better station of life; and do you think, when armed with a diploma and legally qualified to practise, that you will have fulfilled your entire mission when attending the friendless and outcasts of society by merely prescribing for them? If the case is evidently of a fatal character, is the patient to die like a dog? Are we to administer a medicine only, and then depart without one suggestion regarding his future state? Candidates for examination at the college or hall are required to produce certificates of being twenty-one years of age before they become entitled to practise; so that seventeen years of age would be quite time enough to send pupils to the medical school. It is supposed that they may then have acquired sufficient steadiness to undertake the laborious study of their profession. Prior to this age the spare time might be well applied in attending to general learning. An endeavour should be made, on the part of parents, to lay a good foundation, preliminary to the study of medicine, and the broader the foundation the better will it be for the success of the son. Unfortunately too many believe that too much money is thrown away upon a good preliminary education; that mathematics, latin, and other languages will be forgotten, and that only those studies which immediately bear upon the profession should be acquired. Such is the utilitarian view of the question. But is not medicine one of the learned professions? The knowledge of some things out of the professions is a key to the principles of each of them—the key may grow rusty for want of proper use; but let no parent increase the rust by an endeavour to quench the thirst for learning at an age when it requires much encouragement, and the taste for polite literature is frequently disagreeable. It is true, however, that many have gained a good name, and have contributed greatly to the benefit of society, by well-directed attention to the study of their profession, without much previous knowledge; so that the humblest student, with sufficient capacity, by diligent exertion in professional subjects specified as essential by the Royal College of Surgeons and the Apothecaries' Company, may overcome obstacles which now seem insurmountable. There must be practitioners for emergencies in every grade of society.

I would entreat the first-year man to consider the importance of the profession upon which he is entering. When you have read in Holy Writ of our Saviour's commands to "heal the sick," that those who practise medicine are to be honoured "with the honour that is due" to them, and they are called "beloved;" or when you have recollected that Cicero, the most eloquent orator, ascribed the origin of medicine to Divinity itself, has it not occurred to you, that medicine is a noble and honourable profession? Further, if we consider how important a part you have to engage in,—that the lives of your fellow-creatures will depend hereafter upon your skill, that death may come through ignorance, that the wife may become a widow, the children parentless, disease protracted, and the greatest misery entailed on society, it is requisite that you should be properly impressed with the great responsibility of your situation,—with the difficulties to be encountered in order to fulfil your duties efficiently, so that you may give your whole and undivided attention to medical study. Such thoughts as these should be considered by some of the nobility of the land who patronise the medical heresies of the day, as homœopathy, mesmerism, &c. What! is the name of hospital to be desecrated? Is that establishment, which has been designated in some countries the House of God, to become a receptacle for homœopathic trickery? Are the old hospitals and dispensaries to languish for want of funds, to be wasted for such a purpose? A friend of mine consulted a mesmerist regarding the health of a gentleman in Paris. The impostor told her that the clairvoyant could see inside him, and that he was affected with pimples on his kidneys. Observe yon nobleman, who is amiable in every domestic relation, benevolent and condescending to all about him; at one time speaking with propriety as a senator, at another presiding at a public charity for the benefit of the distressed; even he has his head rubbed with a mysterious powder, and cold water applied to it by an empiric, who never even entered to a medical class;—such a process could be administered by any washerwoman, and certainly at a much cheaper rate. Excuse this short digression, intended to point out to you some of the shoals and quicksands which will beset your journey, and be careful to avoid, "*Secretum iter et fallentis semita vitæ.*" I would particularly urge you to be circumspect in conduct, to be careful of the acquaintance you form, and to beware of *the first false step;* otherwise an error may be committed which may cling to you for the remainder of life. Raise your mind from sensual delights, and fill it with the contemplation of truth, and enlarge it with the knowledge of your noble profession. You will have to attend lectures on general anatomy and physiology, practical anatomy, and chemistry, during the first *winter session;* in these the wonders of nature will be revealed, and you will observe the wisdom and design of the Creator. Anatomy is the *root* of medicine, from which all its branches spring; and, although distinctions occur in *practice* between the physician and surgeon, in consequence of its extensive sphere, still the branches are so entangled or connected, that the student, either medical or surgical, must commence at the root, which was planted by benevolence for the relief of human suffering. At first the healthy body is to be dissected, in order that deviations from such a state, that is, disease, may be properly understood, the latter being designated morbid anatomy. Endeavour to apply everything you learn in the dead body to the live one; the relative situation of the viscera in their healthy and morbid states must be carefully remembered, that the knowledge so gained may be available in the diagnosis of disease in the living body, constituting, if I may so say, living pathological anatomy. At the same time, you will meet with instances of morbid affection, which are merely functional, and defy the investigation of the most expert anatomist. [After further remarks, upon the great importance of anatomy, physiology, and chemistry, the subjects of the *first summer session*, according to the curriculum of Apothecaries' Hall, viz., materia medica, botany, and midwifery, were severally noticed.] We may suppose now the *second winter session* to have commenced; in this the student will have to attend lectures on the practice of medicine, surgery for the college, and medical practice at some recognised hospital. He cannot estimate too highly the importance of hospital practice. The College of Surgeons exacts three years' attendance upon it, while the Apothecaries' Company requires eighteen months. I have often seen numerous students crowd round the beds in the hospital on first attending clinical practice, but the number has unfortunately soon diminished until it became "small by degrees and beautifully less." Have they then neglected clinical medicine, and waited to practise upon their patients? Would there be so much discrepancy among medical men, if all had worked hard at the bedside of the patient? Here let the student lay aside prejudice, and learn the value of facts; here let him imbibe a spirit for truth, a sympathy and kindness for the patients; here let him learn humility, when he observes the ravages made upon the constitution by disease. Let him carefully note down whatever he observes; and if, in some cases, the skilful physician or surgeon should fail to cure the patient, let him investigate the cause, and carry a useful lesson into the world, of not priding himself too much upon what he could

have done, should another practitioner be unsuccessful in a particular case. Medicine aims at the physical perfection of man, as well as the cure of disease; it is, therefore, highly necessary to attend to his sanitary condition, and to suggest such cautions as may prevent the diseases to which he is usually subject. Hippocrates recommends the medical practitioner, on visiting the sick, to ask *what uneasiness he suffers from—what occasioned it—how long he has been ill—the state of his belly*—what may be his food. Might he not add one question more, with advantage, in many instances; namely, what is the condition of the drains? Avoid procrastination,—for I have known many, after having attended their lectures, lose opportunities of legally qualifying themselves by waiting for collegiate reforms which they have been daily expecting to take place. Some have lost appointments by neglecting only one course of lectures. Consider how long it takes to effect anything, however useful. You should not postpone your examinations after due preparation. The Factory question has occupied nearly thirty years, the Sanitary question some ten years, and how much remains to be done? There is no time for you to fool with time, and the odds will be much against you in seeking a fortune after middle life; therefore, "begin, be bold, and venture to be wise."

ORIGINAL COMMUNICATIONS.

ANEURISM OF THE FEMORAL ARTERY.

LIGATURE OF THE EXTERNAL ILIAC.

By HENRY SMITH, Esq., F.R.C.S.,
Formerly House-Surgeon to King's College Hospital.

Thomas Whitton, aged 37, a spare man, who has always previously enjoyed excellent health, and has been of moderate habits, consulted me on the 5th of August. I found that he had a swelling about the size of an orange, situated in the middle of the upper part of the left thigh, just above the spot where the femoral artery is crossed by the sartorius muscle. There was strong pulsation in the tumour, and a general heaving of the whole mass when grasped by the hand. The pulsations were very violent, and were stopped when pressure was applied upon the common femoral artery. The skin over it was healthy, but discoloured by iodine paint. He stated that his occupation is that of a viceman at a coach harness-maker's, that he had been accustomed to stand long at his work, and that occasionally he had been obliged to use violent muscular exertion. About two months ago he first began to feel a numbness about his foot, and a fortnight after this his leg felt weaker than the other, and he experienced pains about the knee and ham. It was only nine days previous that he noticed a beating in the thigh and a swelling there. He applied to one of the hospitals, and was seen as an out-patient by one of the house-surgeons, who, after examining the swelling, ordered lead lotion, and subsequently iodine paint. He then applied to another surgeon, who at first did not ascertain the nature of the disease; on a second visit, however, he was told it was something serious, upon which he consulted me.

It was evident that this was an aneurism of the superficial femoral artery, and that it was increasing with great rapidity. I therefore ordered the patient to go home directly and take to his bed, and on the same day my friend Mr. Fergusson kindly examined the case with me, agreed with me as to the nature of the disease, and advised immediate interference. I had considered that there was space enough for the application of a ligature upon the superficial femoral itself, but Mr. Fergusson advised me, if I used the ligature, to tie the external iliac. This gentleman, at the same time, considered it to be a good case for a trial of pressure. I determined to resort to this plan of treatment, if the patient preferred it; but, on giving him the option of the two methods, he agreed to submit to the ligature. Having kept him perfectly quiet for two days, and cleared out his bowels, by free doses of castor oil, I proceeded to the operation at three o'clock on the 7th, in the presence of Professors Fergusson and Partridge, my friend Mr. Ure, and numerous others.

Operation.—The patient, being first placed fully under the influence of chloroform, by Dr. Snow, was put upon a table upon his back, his shoulders being raised, with the left thigh somewhat flexed. I made a curved incision from the anterior spinous process of the ilium to the external abdominal ring. The tendon of the external oblique, and the fibres of the internal oblique and transversalis, were cut through. The transversalis fascia and its connecting tissue were then cautiously divided on a director, and the peritoneum pushed up. The artery was then sought for, and found somewhat deep in the pelvis; its sheath was then opened with a blunt probe, and the aneurism needle applied from within outwards, and the vessel tied.

Some difficulty was experienced in the latter part of the operation, in consequence of a large gland being situated just over the vessel. It was impossible at first to prevent it from slipping in the way every time I attempted to seize the sheath of the vessels; this difficulty was overcome by detaching the gland from its connexions. The needle was passed with the greatest facility around the artery; and as to the vein, I did not even catch sight of it.

The edges of the wound were brought together by sutures and straps of adhesive plaster, and a compress and roller applied over all.

10 p.m.—Has suffered some pain down the leg; no pain in abdomen; no vomiting; temperature of both thighs 95. To take an opiate, and to drink water and gruel.

8th.—He has suffered excruciating pain in the limb below the knee most of the night, and has had little rest; pulse, 93; no tenderness in abdomen; countenance cheerful; thighs equal in temperature; toes of the limb on the operated side cold. To have beef-tea, and to take another opiate at night.

9th.—Feels very comfortable, and his only complaint is of feeling very hungry; pulse 90. To have an egg and beef-tea.

10th.—I this morning undid the dressings, and found that three-fourths of the wound had nearly healed by the first intention. A moderate amount of pus was squeezed out of the outer corner, along the track of the ligature.

17th.—The patient has been doing well ever since. The discharge from that portion of the wound which remains open is moderate and very healthy. The temperature of the limb is well kept up, although the toes are still somewhat cold. I carefully examined the leg, but could not detect any pulsation either in the anterior or posterior tibial artery. The aneurismal tumour is much diminished in size, and is quite solid.

27th.—For the last two or three days I have been exerting slight traction upon the ligature, and, on dressing the wound this day, it was easily withdrawn exactly twenty days from the date of operation; only that part of the wound where the ligature was hanging out is open. The patient is remarkably well, and feels strong and hearty.

Sept. 4th.—The patient is sitting up to-day, exactly one month from the date of the operation. The wound has all healed up, with the exception of a very small point at the outer edge.

16th.—This man has now for the last week walked daily up to my residence, for the purpose of having the wound dressed; it has entirely healed, and the cicatrix is firm and healthy; and there is no disposition to hernia. The aneurismal tumour is small, and quite hard. There is some numbness about the ankle. His health is in every respect good; and I have told him he may return to his work shortly.

22nd.—I have carefully examined the patient for the last time to-day; he is quite well, and the one limb is as strong as the other. By a most careful examination, however, I cannot detect any pulsation in the popliteal or tibial arteries.

REMARKS.

This is, perhaps, one of the most favourable and rapid recoveries on record, after ligature of the external iliac artery; and it is doubtless attributable, in a great measure, to the circumstance of the patient being a most fit subject for such an operation. His health was remarkably good,—he was very slightly made,—and he had that calmness of mind and determination about him which the surgeon, on the eve of a great operation, is always glad to see, more especially when long confinement and the strictest quietude is necessary afterwards.

Ligature of the external iliac has been performed so many times with success, that the surgeon may resort to this proceeding with greater confidence, perhaps, than to a similar one on any of the great arteries of the body. It would be somewhat difficult, or impossible, to obtain accurate statistics

of this operation; but when we can get at considerable numbers, we find that success has been great. Mr. Hodgson, in his original work on the arteries, mentions twenty-two cases; out of these, fifteen completely recovered, and of the seven which died, the fatal result was owing to the peculiar operation itself only in three instances. Of nine instances which Mr. Bransby Cooper relates in the *Medical Gazette*, July 6, 1849, there were only two fatal results. Dr. Valentine Mott (a) informed me that he had ligatured this vessel seven times, and that four of his cases completely recovered. I have only had the opportunity of seeing two cases previous to my own operation: the one, by Mr. Partridge, in 1846; the second, in the commencement of last year, by my friend Mr. Nunn; in both, recovery ensued.

It may be asked, why I did not apply pressure in this instance, as it appeared to be so well adapted for such a case; and as some strong aspersions have been lately thrown upon those London surgeons who have employed the ligature, rather than the method which has been so admirably carried out by our brethren in Dublin, I will make a few remarks on this point.

My own observation of the treatment of aneurism by pressure has been confined to one case alone, and the result here was by no means such as to lead one to a favourable opinion of this plan of treatment. But, I am bound to state, that the patient himself, from an over anxiety to get well quickly, was the main cause of the unfortunate circumstances which arose; for he screwed up the tourniquet with such vigour when he was left alone, that an excessive amount of sloughing occurred, and it was impossible to follow up the treatment. From the occurrence of such a casualty in one case alone, it would be absurd to form any opinion. This must be arrived at from the observation of cases where the plan has had a fair and unequivocal trial. Such a trial has been made by numerous surgeons, especially by that distinguished body of men who are at the head of the surgical profession in Dublin, and the results have turned out to be most satisfactory. It was not, therefore, from a want of conviction on my mind of the efficiency of pressure, that it was not used in this case. I did what I considered it to be my duty under such circumstances. I submitted to my patient the choice of either proceeding, but did not press either upon him. He at once, without hesitation, said he would rather "be cut," and thus relieved me of a great amount of responsibility. In my humble opinion, it is the duty of the surgeon, when he has to treat a case of aneurism which is so situated that compression can be applied, to place both plans before the patient; for the experience of the last few years has, without doubt, shown that compression is, when properly applied, a most efficient agent, and I believe a safer one than the ligature. Professor Miller has, in his second edition of the "Principles of Surgery," pointed this out as clearly as any one, and has, in a brief space, fully discussed the *pros* and *cons* of the plan of treatment by compression, in a most impartial and unprejudiced spirit; and this is the more to be admired, as the author himself has had an unfortunate experience of it; and, moreover, he belongs to a school where most violent and absurd opposition has been offered to one of the most useful discoveries in modern surgery.

It may again be asked, why I did not perform the simple, and apparently less dangerous operation of tying the superficial femoral artery, rather that submit my patient to the hazard of so serious a procedure as tying the external iliac. It is true that the aneurismal tumour was seated at the lower part of Scarpa's triangle, and therefore I could have found space enough to enable me to cut down upon the artery there, but it is another question, as to whether I should have acted in a judicious manner, for two reasons,—in the first place, it would have been necessary to place the ligature just below the trunk, which carries a large stream of blood to the deep parts of the thigh; consequently, from this cause alone, there would have been a great chance of secondary bleeding. In the second place, it was impossible to say in what condition the artery just above the aneurism was in. We all well know that, in such a case, the disease of the coats of the vessel too often extends some way up from the situation of the tumour itself, but we have no possibility of correctly ascertaining this point; in order, therefore, not to run any danger of incurring secondary hæmorrhage by placing a ligature around a diseased artery, it is better to tie it in a position where there is little chance of its being unhealthy. Influenced by these reasons, then, I gave up the thought which I first entertained of tying the superficial femoral, and preferred tying the iliac, which, although a much more formidable proceeding, and one probably attended with more immediate danger to the patient,—for he may die within forty-eight hours of peritonitis, as in the celebrated case of the late Mr. Liston, where he operated upon Captain Seton,—nevertheless, it has not, I believe, been attended with less success than has followed ligature of the femoral; indeed, statistics tend to show that ligature of the external iliac has turned out to be the most successful operation of any on the large arteries of the body.

I had the option of tying the common femoral, and why was this not done? It is true that it might have been easily accomplished, and, in all probability, this artery would have been found in as healthy a condition as the iliac; but ligature of this trunk, in the few cases that it has been done, has proved to be so unsuccessful that a surgeon would not, I apprehend, think of resorting to it if he could possibly avoid it. There are two large branches above, and below is the profunda, and of course the vessel must be tied between them, and it is not necessary to state how unfavourable it is to have a ligature on an artery close to any large branch,—how adverse such a circumstance is for the occurrence of those phenomena which are essential to the proper separation of the ligature without hæmorrhage. Secondary bleeding is very liable to happen. In Abernethy's famous case, he first tied the common femoral for aneurism, but tremendous hæmorrhage occurred after some days, and he was obliged to resort to ligature of the external iliac.

My excellent friend, Dr. Davies, some years ago, when surgeon to the Hertford Infirmary, placed a ligature upon the common femoral for secondary hæmorrhage from the superficial vessel; both secondary bleeding and gangrene took place. This occurrence of gangrene is another reason why we should avoid ligaturing the common femoral. It is not so much to be feared after the external iliac has been tied. This, on first consideration, would hardly be thought to be correct; but a reference to the anatomy of the two vessels, and to the manner in which the circulation is carried on after each operation will explain it. When a ligature is placed on the external iliac artery, and the blood is prevented from getting into the limb below through its ordinary channel, the supply is kept up chiefly by means of a very free anastomosis between the branches which come from the internal iliac and those of the profunda. But this is not all,—there are important communications between the circumflex ilii and branches from the internal iliac and aorta; also between the epigastric and internal mammary. These, when enlarged, must transmit a large quantity of blood. Of course, if the ligature be applied on the external iliac *above* the origins of the circumflex and epigastric, the limb below will get the benefit of an additional quantum of blood which is passed by these vessels into the main artery below. If, however, as in ligature of the common femoral, the vessel is obstructed *below* the origins of these two branches, it must necessarily happen that the free anastomosis between them and those from the aorta and internal iliac, will be of little or no service in carrying on the circulation. The limb will be nourished alone by the blood which passes from the branches of the internal iliac to those of the profunda; hence there must necessarily be a greater chance of gangrene taking place. Except, therefore, in causes of traumatic hæmorrhage, it will be generally more advisable to place a ligature upon the external iliac rather than tie the

(a) I had the great pleasure of seeing and conversing with this illustrious surgeon, who may be looked upon as the Astley Cooper of America. He passed through London a few weeks ago, and, during his hasty visit, he called at Mr. Fergusson's house to pay his compliments to his distinguished contemporary, and it was there I had the good fortune to see him. Valentine Mott is, in person, a man rather above the middle height; he is particularly pleasing and unostentatious in his manner. There is nothing very striking in his countenance,—nevertheless, the small expressive mouth, and the broad yet not lofty forehead, indicate the talent and energy which he must be possessed of. He does not appear to be above 55 years of age, but he must be near 70, as he told me that he was a pupil of Sir Astley Cooper's forty-six years ago. He conversed freely and with enthusiasm on surgical matters. He told me that he was the first who tied the common iliac with success: the operation was done for an aneurism of the external iliac, which was seated near the bifurcation; it was many years since, but the patient is now alive. He was the first surgeon who performed resection of the lower jaw; the first, also, who accomplished the formidable operation of resection of the entire clavicle, for an osteosarcomatous tumour. This patient, an American gentleman, is now alive, and can move his arm well. He was the first surgeon who put a ligature upon the arteria innominata. He has tied the external iliac artery seven times, also the subclavian six times, and only once with non-success, and this was inside the scaleni muscles, "where," he emphatically exclaimed, "it will never succeed."

common femoral, although the one is a much more difficult operation than the other. Nevertheless, the mere difficulty in the manual proceedings must not be placed in the balance against the probability of the ultimate and favourable result.

I cannot conclude without stating how much easier this operation was rendered in consequence of the chloroform. From the cautious and effectual manner in which it was administered by Dr. Snow, the patient was kept as quiet as though he were a corpse during the whole time the operation lasted, which was near half an hour. The breathing was so tranquil that there was hardly any movement of the abdominal muscles; and thus I was enabled to divide tissue after tissue, without fear of doing any mischief. Chloroform is a great boon indeed to the surgeon, when he is to search into the hidden recesses of the living body for large blood-vessels, and when he is obliged, with an almost unwilling, yet not trembling hand, to cut among those delicate tissues which he feels it would be probably fatal to wound. When, however, the agent is employed in an operation on the arteries, it should be administered in such a manner as to keep the patient perfectly quiet, otherwise it will only add to the difficulty of the proceedings.

To my kind and respected friend, Mr. Fergusson, I am much indebted for the assistance he gave me in this the most trying operation I have yet undertaken, and for the interest he has since taken in the case of his old pupil.

13, Caroline-street, Bedford-square, Sept. 1850.

OPERATION ON HARE-LIP FOUR HOURS AFTER BIRTH.

By HENRY BATEMAN, Esq., M.R.C.S.

Having read Mr. Henry Smith's note in reference to the early performance of operations for the cure of hare-lip, as recommended in Ireland, published in the *Medical Times* of the 27th July, 1850, I am induced to forward a few particulars of the following case:—

Mrs. T., of Portland-place, Islington, was delivered on the 1st of June, 1850, at a quarter past eleven o'clock, of a male child, having a fissure extending through the right side of the lip and the hard and soft palates. The opening was so large, that the interior of the nose was extensively exposed, and the external deformity was further increased by the imperfect development of the lower part of the right ala nasi, which appears even now to contain less of the cartilaginous element than its fellow, and at birth, and for some time afterwards, it lay quite flaccid over the right nostril, moving every time the child breathed either in or out, and as thin as if consisting merely of skin and mucous membrane.

The labour had been rapid, and the child was born on my arrival. There was considerable flooding, which ceased almost immediately after the removal of a partially adherent placenta. Having attended to the safety of the mother, who, happily, was ignorant of her infant's condition, and having ascertained the extent of mischief in the child, I explained the circumstances to the father. Fortunately for me he is a sensible man; and, therefore, when I mentioned to him my reasons for an early operation, he was prepared at once to commit the case entirely into my hands, and requested me to do what I believed to be the best for his child.

After attending to a few other pressing matters, I returned at *a few minutes past three o'clock on the same day*, accompanied by my pupil, Mr. Philip Jones; and then, after ascertaining that the mother was going on well, proceeded at once to the operation. The lip was first detached for some distance from the subjacent gum; but, although there was some undue projection of what in animals would have been a part of the os incisivum, this was not so great as to require removal. I then pared the edges of the fissure in the lip, which were frightfully far apart, and brought them together by the twisted suture in the centre, and two fine silk ligatures at the extremities, one being placed close to the nostril, and the other at the lower border of the lip. My twisted suture was not around the ordinary hare-lip pin, which is necessarily of considerable thickness, but over a very fine sewing-needle, headed with sealing-wax, which penetrates more easily, and leaves a less scar in consequence of being thinner. The lips required a good deal of dragging to bring the parts well together, and, therefore, I placed a pad on each cheek, and secured it in its situation by a bandage, the pressure of which tended to force the cheeks forwards, and the sides of the lip together. The bleeding was moderate, and was well borne by the little patient. The needle was removed on the 5th June, four days after the operation, and the other ligatures a few days afterwards. The case went on exceedingly well, notwithstanding the food passed partly through the right nostril whenever he ate anything, in consequence of the large fissure in the palate. I saw the child occasionally up to the 24th of June, when my attendance ceased until the 19th of July. I was then sent for to see him, in consequence of what was deemed to be an attack of convulsions. I found him much emaciated, and suffering severely from aphtha and diarrhœa; indeed, he appeared to be almost *in articulo mortis*. I dared not give more than the slightest hopes of his recovery, but having directed that half a teaspoonful of brandy and a little lime-water should be given in his food, in addition to the usual remedies for his disorder, he rallied and recovered; and when I saw him last, on Saturday, 2nd inst., he was looking well, and in a more favourable condition, as regards the probability of life, than the majority of children of his age who are brought up by hand.

I may remark, that the dragging of the lip appears to have had a very good effect upon the palatine fissure. This is now not nearly so wide as it was at birth, and I look forwards, with a very large amount of hope, to being able to secure its closure, at some future period, by operative means.

As Mr. Smith appears to take a good deal of interest in these cases, I shall have much pleasure in obtaining permission for him to see my little patient, should he signify his desire to that effect.

6, Islington-green, 10th August 1850.

YELLOW FEVER ON THE COAST OF BRAZIL.

[From authentic sources.]

It is satisfactory to be able to state, that the fever, which has spread with so much virulence along the coast of Brazil during the preceding eight or nine months, is now rapidly on the decline. At Pernambuco and Bahia it has entirely ceased, and, although a few scattered cases were still occurring at Rio Janeiro up to the second week in August, they were principally confined to the more unhealthy parts of the town, and the merchant shipping lying furthest up the harbour. With respect to the infectious propagation of the disease, opinions seem to be divided; for, while one class of observers insists that it was of local origin, and not communicable by personal emanations, another as stoutly maintains that it was imported, and spread from place to place by intercourse. There is, however, one point on which all seem to agree, namely, that it was first observed at Bahia, after the arrival of a slave vessel from the coast of Africa. There appears to be no question as to the first cases occurring on board this vessel; but, whether the disease in her was originally contracted on the coast of Africa, and carried across the Atlantic; whether it spontaneously broke out on the passage, or after her arrival on the American shores, seems, from the clandestine nature of the traffic in which these vessels are engaged, not yet to have been ascertained; nor is it likely that it ever will be. Still, whether imported or of spontaneous origin, it seems to be clearly evident that it next attacked the crews of the vessels lying nearest to the slaver, and then, as it became more rife amongst the shipping, it spread in the manner of an infectious disease to the shore; and ultimately to the inhabitants beyond the boundary of the city.

At Pernambuco, which, like Bahia, had been free from any epidemic disease for several years previously, it is supposed by those who have adopted the theory of infection, to have been introduced by the same slave vessel (Alcyone) which imported it into Bahia. After landing a cargo of slaves at the former place, this vessel ran down to the latter while some of her crew were still suffering from it; at the same time, it is observed, that immediately after her arrival, two medical gentlemen, who had only recently come from Europe, were attacked in the town, although they had not had any communication with the infected vessel. These two cases were the first which occurred in Pernambuco. Subse-

quently, in the course of a few weeks, it extended to the merchant shipping which lay contiguous to the Alcyone; whilst it simultaneously burst forth in those parts of the town furthest distant from the shore, towards which it approached by rapid strides, until it crossed the tide setting landward from the shipping. From these and other concurrent circumstances, it was inferred by those who were opposed to the doctrine of importation, that the fever sprang from other sources than the Alcyone, and that it was not propagated by intercourse with the infected. Cases occurred at the distance of eight or nine miles from the town amongst persons who had neither left their homes, nor had any communication with the infected localities.

The circumstances attending its eruption at Rio de Janeiro were of a somewhat similar nature. On the 9th of December, 1849, an American vessel, last from New Orleans, arrived in the harbour, with a clean bill of health; she was consequently at once admitted to pratique. In the course of a few days, however, two of her crew were attacked with fever, and taken to the hospital Misericordia, where they died about the 25th of the month. Black vomit occurred in each of these cases. In the meantime, the Petrel, a British vessel direct from Bahia, where the yellow fever was raging when she left, arrived in the anchorage on the 23rd of December. One person had died on the passage from Bahia, and there was another ill on board at the time of her arrival; his case, also, terminated fatally. As black vomit likewise occurred in these cases, there can be no question as to the identity of the disease in the two vessels. Soon after this, other cases began to make their appearance, first amongst the shipping in the upper part of the harbour, and then amongst the inhabitants residing in the low filthy houses close to the shore, which are generally frequented by the sailors when they are permitted to land.

Towards the end of February, it had extended to all parts of the city, to the suburbs, and even to isolated places several miles inland. A few European families placed themselves in strict quarantine, admitting no sort of communication with the infected districts or with the city, yet they did not escape any more than those who took no such precautions.

How far the fever penetrated towards the interior has not yet been ascertained with any degree of accuracy; but, as the natives, the African slaves, the coloured races, and even the well-seasoned Europeans, suffered from it in a comparatively mild form, there is every reason to hope that, if not already extinct in the inland districts, it will soon become so.

Various plans of treatment having been tried, with no very satisfactory results, several of the more heroic practitioners from this country attempted to break the force of the disease by "chloroforming" their patients; and, if we may believe their statements, not without considerable success. When the symptoms ran high, and were accompanied with restlessness and delirium, the inhalation of the anæsthetic agent, which sometimes required to be repeated at short intervals, produced partial insensibility, a diminution of pyrexial action, and ultimately refreshing sleep. We confess, however, to some misgivings as to the propriety of using this remedy, until further trial be made of it by other—if we may use the phrase—less biassed experimentalists.

Several vessels had taken refuge in the river Plate, with the disease on board; but, not being allowed to communicate with the shore the disease did not spread.

Hunterian Museum.—We have great pleasure in stating, the Council of the Royal College of Surgeons have just made a valuable addition to their magnificent museum, by the purchase of the collection formed by the late Alexander Nasmyth, Esq., of microscopic preparations of the dental and other animal tissues of man and the lower animals. That part of the collection relating to the structure of the teeth is accompanied by upwards of 200 most accurate drawings by distinguished artists.

Princely Donation.—Dr. G. L. Roupell, one of the Physicians of St. Bartholomew's Hospital, has just enriched that noble institution with portraits of Drs. Watson and Latham, taken by that distinguished artist Mr. Pickersgill, who is now engaged on the portrait of Professor Owen, also to be presented by the worthy Doctor to the institution. Mr. H. H. Pickersgill has copied from the originals by Reynolds and Jansen, portraits of John Hunter and William Harvey. Of the former we have great pleasure in speaking in high terms of approbation, as one of the most successful copies we have yet seen of the great original.

LIST OF MEETINGS FOR THE ENSUING WEEK.

TUESDAY, October 15.—Linnæan Society of London. Eight o'Clock.

——— ——— Pathological Society of London, 33, George-street, Hanover-square. Eight o'Clock.

THURSDAY, October 17.—Harveian Society, 21, Edwards-street, Portman-square. Eight o'Clock.

FRIDAY, October 18.—Botanical Society of London, 20, Bedford-street, Covent-garden. Eight o'Clock.

SATURDAY, October 19.—Guy's Hospital Physical Society. Eight o'Clock.

——— ——— Medical Society of London. Subject:—Dr. Semple on some Cases of Valvular Disease of the Heart; with Observations to show that those Diseases are not so rapidly fatal as is generally supposed. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 12.

THE NATIONAL INSTITUTE AND MEDICAL REFORM.

The *Medical Times* has ever stood aloof from party. Its political objects are, to advance the general weal; to promote goodwill among the different sections of the profession; to advocate the claims—because those claims are founded in justice—of the General Practitioners for a fair share in the management of the existing medical institutions, or to an incorporation in a separate college. In the prosecution of these objects, we lately found it necessary to advert to the Bill framed by the Council of the National Institute; and, as in that Bill is a clause manifestly unjust, and certain to prove highly injurious to the public and the profession, especially to those surgeons engaged in general practice, we expressed our disapprobation of it. We pointed out, in our articles of August 10th and 24th(a), that the inevitable tendency of that tenth clause would be to lower the professional acquirements of the General Practitioner, and to inundate the country with imperfectly educated M.D.'s, licensed, by virtue of their degree, to practise in every branch of the profession. We pointed out clearly that the Bill contained no clause by which equality of examination would be secured in the three divisions of the United Kingdom; and we pointed out, moreover, how such security might be offered. We recapitulated, in brief but strong terms, the "monstrous imperfections" of the present system, and expressed in plain language our desire that it should, and our conviction that it must, ere long, terminate; but, while advocating the propriety, nay, the necessity, of altering the present state of things, we unequivocally expressed our conviction, that the remedy proposed by the Council of the National Institute contained an ingredient sure to inflict more injury on the body medical than does the disease they seek to cure. The Council of the Institute having, from an error in judgment, framed a Bill injurious to the great body of the profession, and most adverse to the public weal, have a right, an undoubted right, so long as they believe their error to be truth, to use all the arguments they can invent in support of that Bill. But they have no right to misrepresent us; they have no right to assert, in the face

(a) By some oversight, a Contemporary has referred to our Article on "Medical Reform," of August 16th; as our Journal of the 17th (the *Medical Times* was not published on the 16th) contained no Article on the subject, we suppose the Institute must refer to the articles of these dates.

of our asseverations to the contrary—in the face of our *constant* labours in favour of the interests of the General Practitioners—they have no right, we say, to assert that "the *Medical Times* would have the profession remain as it is." Our views on medical reform have undergone no change—we are, and shall continue to be, the unflinching advocates of every alteration by which the profession and the public are to be benefited. But we will never—no, not for an instant—owing as we do our present position to the support of the profession as a whole, pander to the prejudices of any party, or any section of a party; nor advocate, in order to serve the interests of the few, a measure which every unprejudiced man must see could not fail seriously to damage the great mass of the profession, and the General Practitioners in particular.

Although our confidence in the soundness of the judgment of the Council of the National Institute has been shaken by the support they have afforded to the present Bill, still, even now we can hardly suppose that they have, as a body, sanctioned the establishment of a journal, the first leading article of which contains such nonsense as does that of the *Institute*. Whether it be that anger is short madness, and that the writer of that article was *very* wroth, or whether it be, that in sober earnest he can do no better, we pretend not to determine; but this much advice we will venture to give to the author and his friends: if they would gain the support of the profession, they must comprehend that the day is gone by when the worn-out clap-trap of "spurned and insulted masses," "hereditary bondsmen," and such like balderdash, can have any weight on the minds of its members. They must learn also, that, if they would instruct, they must at least write so that educated men may comprehend the meaning of their sentences. "The *Medical Times*," says the *Institute*, commenting on our Article of August 24th, in which we declared that the *monstrous imperfections of the present system must lead to a change*, "would have the profession *remain as it is*—the masses "spurned and insulted: but, urged by the privileged and "powerful few, aided and abetted by the journalism of the "day, and *this* on the grounds of *their own* impotency, the "*Medical Times* mis-estimates the power of the General Practitioner." Doubtless our juvenile brother will be able, next week, to offer an interpretation of the above. The article abounds in similar obscure sentences,—sentences in which the relatives have many antecedents, but none that very clearly belong to them; in fact, relatives that have relation to everything in general, but to nothing in particular. Such writers must moreover learn that leading articles should not contain sentences so inconsistent with each other as the following:—

"The duty"—*i. e.*, of starting a new Journal—"has been imposed on us by the fact, that the *Medical Times*, in its article of August the 16th, has indulged in a disparaging commentary on the Bill."	"We shall content ourselves on the present occasion with the averment, that *we are not the supporters of the Bill.*"

Put into plain language, these sentences, which we have placed in parallel columns, occurring as they do within a few lines of each other, would say, the *Medical Times* refused to support the Bill of the National Institute, therefore the Council of the Institute, feel the duty to be imposed on them of starting a new medical journal, called by their own name, "*The Institute*," which is to follow in the wake of the *Medical Times*, and also to refuse to support the Bill.

In conclusion, we can but rejoice for ourselves at the publication of the *Institute*, because it offers the most unanswerable refutation of the calumny of a contemporary, that we are the organ merely of a party. But let the promoters of the *Institute* believe if they can—we will answer for it no one else will—that a journal, bearing the name of the *Institute*, published because the *Medical Times* refused to be the tool of a section of the profession, is, as its Editor professes it to be, influenced by no party consideration.

THE COLLEGE OF PHYSICIANS AND ITS LICENTIATES.

On several occasions we have expressed our conviction of the propriety of keeping the license to practise and the honorary degree of "Doctor of Medicine" distinct from each other, and have stated that the licentiates of the Royal College of Physicians, simply as such, have no right to the appellation of doctor, or to affix to their names M.D. The justness of our opinion has been called in question, and the following arguments adduced by a respectable contemporary:—

1st. That the consequence of such an attempt to deprive the licentiates of the College of their assumed titles would lead to ridiculous results; certain honourable gentlemen would be shorn of the coveted letters, and certain *dis*honourable gentlemen left in possession of them.

To this we would simply answer, that in a question of *right* the eyes of the man who regards consequences are very likely to be blinded.

2ndly. That its Charter gives the College the power of granting its licence to those not possessing any degree.

Doubtless the College has that *power*. All we have questioned is its wisdom in using it. But the fact, that the College has power to license those who have not graduated at a university, does not prove that the possessor of the licence has any right to use a title indicating him to be the possessor of a university degree.

3rdly. And it is on this that our contemporary mainly rests his hope of establishing the right of the licentiates to the title of doctor of medicine.

"Every chartered corporation," says the *Medical Gazette*, "may grant a title to designate the members belonging to it." Again we say, doubtless any association, whether chartered or not chartered, may designate its members by any name or letters it may please to be pleased with, or it may fancy its members will be pleased with; but the members of that chartered or unchartered association have no *right* to that title; and if they adopt a title, or affix to their names letters which are already in use to designate certain members of the community to whom the Crown has been pleased to grant "the right" to use them, we opine that they are guilty of at least practising deceit. Thus, we can imagine a certain number of ragamuffins associating together, and terming each other Fellows of the Society of R.'s. Now, these men might affix to their names F.R.S., but we should say they had no *right*, moral or legal,—the only rights we are acquainted with,—to affix such letters to their names. We maintain,—and we cannot comprehend there can be any disputing of our position,—that the College of Physicians can rightfully grant to those connected with it only such title as the Crown has given it the power to grant. Its Charter, we say, bestows on the College no power to make doctors in medicine. Let any one who doubts our assertion refer to the original, granted by Henry VIII., at the instigation chiefly "of our Most Rev. Father in Christ, intituled the Lord Cardinal, &c.," and they will there find the

fellows spoken of as "*medici*," or "*docti et graves viri*," and in no single instance as "*doctores medicinæ;*" and, in a letter written by King Charles to the College, in the year 1674, we find the distinction between doctors and physicians distinctly preserved thus :—

"Charles R.—Trusty and well-beloved, we greet you well. Whereas we have been informed that there are several pretended physicians, and doctors graduated in the universities beyond the seas," &c., &c.

i. e., there were then men who pretended to be physicians *medici*, who were not so, and doctors, *medicinæ doctores*, who had received a degree from foreign universities, and who, consequently, had not taken the oaths of Allegiance and Supremacy; then, indeed, matters of grave moment; for in 1674 the Test Act became the law of the land.

Again, in the same letter, the King directs the College not to admit any person who had not "kept his Act for Doctor in Physic," (in a university,) "and don his exercises accordingly."

Now, although the document referred to is only a Royal letter, unconfirmed by Parliament,—a letter which has not the force of law, yet it shows very clearly that the licence of the College did not then make its possessors doctor, or why should the King have directed that the applicant for the license should, before being examined by the College, have "kept his Act for Doctor of Physic, and don his exercises" at a university.

The College itself always speaks of those connected with it as *socii* and *permissi*. When it grants a licence, it affixes the letters M.D. to the name ONLY of those who have obtained elsewhere, and from those legally entitled to bestow it, the title of doctor of medicine.

Thus, "Sciant omnes nos Joannem Ayrton Paris, Præsidentem Collegij Medicorum Londinensis, unà cum consensû sociorum ejusdem *auctoritate nobis a Domino Rege et Parliamento commissâ*, examinasse et approbasse ornatissimum virum Gulielmum Dash, M.D.," if the said William possesses a university degree, but simply "Gulielmum Dash," if he the said William possesses no university degree. The College, by this omission, acknowledges that it has no power to create doctors in medicine; and, if it has no power from the Crown to confer the degree, we must contend,—and we are unable to comprehend how any one, unless it be those who, possessing the College licence but no university degree, have their minds warped by prejudice and interest, can arrive at a different conclusion—that the recipient of the College licence, as such, has no right to assume any title but that of licentiate or *permissus;* this being all the Charter gives the College the power to grant—this being all the College *itself* claims the power of bestowing; the licence to teach medicine does not give the holder of the licence the *title* of "Doctor of Medicine," any more than the degree of Doctor of Medicine, *per se*, as of the London University, gives the graduate the *right* to teach medicine. The Crown, with the consent of Parliament, has been pleased to vest the right to make doctors of medicine, and the right to grant licenses to practise and teach, in the hands of two distinct corporations, and we repeat that it is our conviction that the public and professional weal require that they remain in distinct hands.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE Royal Medical and Chirurgical Society has just undergone that cleansing and purifying process which at this particular season awaits all museums, public libraries, club-houses, and literary institutions. But it is to be hoped that the improvements contemplated are not to be restricted within the circumscribed sweep of the painter's brush or the housemaid's broom. It is right, indeed, that corporate bodies, as well as private families, should, at certain periods, "set their house in order;" whitewash clouded ceilings, scrape down dirty walls, obliterate fly-stains, hunt cobwebs out of secret holes and corners, and guard against an Augean accumulation of divers nuisances prone to collect in outhouses, lumber-rooms, and back attics. It is well, also, that folios and quartos, and the duodecimo volumes which hybernate, from suspended circulation, on the inaccessible top shelves of libraries, should occasionally be taken down and thoroughly dusted; which various domestic operations, we have no doubt have, during the recess, been admirably performed in the premises of the Royal Medical and Chirurgical Society,—nay, we confess that we have a pleasing anticipation, that the newly-beaten carpets will communicate to our footsteps something like a sense of Persian luxury. But we must not be satisfied, we regret to say, with all this sublunary enjoyment. We live in an age of increasing intelligence. The spirit of progression is abroad. It has already sapped to their very foundation all unrighteous monoplies; it has carried light into the obscure council chambers of the closest corporations; it has trodden into dust the very letters in which the monkish charters of old were written, and which aimed at imposing restraint upon the intellectual and moral freedom of the mind; it has enlarged to an almost boundless extent the different sciences which, veiled in mystery, were originally only glanced at in the curricula of education prescribed by our ancient universities; and we believe there is not a chartered society or scientific institution in the kingdom that has not, within the last few years, been obliged to liberalise its constitution, revise its by-laws, and participate in this onward movement. We are not ambitious of being considered contumacious Radicals. The times must be evil which give rise to your Wat Tylers and Jack Cades; but this much is certain—and it is the historic "moral of the tale"—that a blind and pertinacious resistance to improvement must in every case bring about inevitable ruin. Opposition begets collision; collision begets revolution; revolution begets anarchy; and these have in all ages been the successive steps of the decline and fall of the mightiest empires and the noblest social institutions.

The Royal Medical and Chirurgical Society of London stands upon a proud eminence; it has accomplished much that redounds to the honour of the profession, but from it much more is yet expected. Its Council may be composed of men endowed with great sagacity, profound erudition, and high professional reputation. But Solomon in all his glory was only a fallible mortal,—and the best physicians are not always the best legislators;—wherefore the Augustan dignity of our official friends must not be offended by our calling their attention forcibly to the necessity of carrying out certain improvements which are essential to the well-being and prosperity of the Society. We do not propose in this place to discuss those principles of its constitution which are, we know, open to and even challenge amendment—for the present we leave that task to our able correspondent "Spectator"; nor shall we now comment on the social policy connected with many important points of its administration, which were, at the last annual meeting, sorely and severely criticised. Our object is, to take advantage of this very appropriate season to insist only on certain improvements which may, without any difficulty, be forthwith adopted. We allude particularly to

the library department. It is well known to the profession, that the library of the Royal Medical and Chirurgical Society is one of the most valuable in the kingdom. Nearly a thousand works are added to it annually; and, according to the last report, this library now contains about 22,000 volumes. It is almost incredible that such an extensive collection of books on all subjects connected with medical science should be inaccessible to the Fellows of the Society for twenty out of the twenty-four hours; yet such is the fact,—the library opens at one, and closes at five o'clock! There might, it is true, have been some apology for this very inconvenient arrangement, when the Society only held apartments in the house; but now that it has obtained the lease, and has become sole tenant in possession, there can be no excuse for the continuation of any such restriction. But this is not all. The Fellows have now a right to expect and to demand an increased amount of accommodation; but the only new arrangements effected are, that the entrance hall has been greatly improved; the ante-chamber, or passage to the Hall itself, enlarged and better ventilated; and the old council-room on the ground-floor allotted to those gentlemen who wish to read or write free from interruption; while those who desire to look over the journals and talk *sotta voce* are to be permitted to do so in the usual Hall of the evening meetings. Here, then, we may fairly pause to inquire, what the Council intends to do with the entire upper portion of the house? It was only reasonable to expect that, when taken, its lofty and spacious rooms on the drawing-room floor would be handsomely and conveniently fitted up for the reception of the Fellows; but, instead of this, it seems that they are still to be "cribbed, cabined, and confined" on the *rez de chaussée*. We must say that the Council, in this respect, appears to act with the greatest inconsistency; for no sooner did they succeed in getting possession of the lease of the premises, than they fell, like Bottom the weaver, into "such a dream! a most rare dream"—one of Eastern magnificence. They imagined themselves in the Areopagus at Athens, listening to a debate between the Platonists and Pyrrhonists, and upon awaking discovered they had been all along talking within too narrow a superficial area; forthwith, therefore, they sent for those eminent architects, Messrs. Wigg and Pownall, and determined to enlarge the Hall at an enormous cost. Their notions were now so princely, that they recommended a prodigal vote to be granted of not less than 2000*l.*—nearly the whole funded property of the Society, to "repair the house and improve the Hall;" and convened a special meeting to approve of their plan. But the extravagance and inexpediency of such a proposition were so clearly demonstrated, that the meeting could not do otherwise than adjourn *sine die*—leaving this grand architectural design to fall to the ground, and disappear like one of the dissolving views in the Polytechnic Institution. The Council has since this permitted the fire of their own ambition to become extinguished, and has fallen into the very opposite and most antagonistic extreme, resembling the young woman described by Swift, who, after bargaining with a tradesman for a gown of black silk velvet at a guinea a yard, left his shop, contenting herself with buying an eighteenpenny cotton one. The building project was certainly improvident, and very properly over-ruled; but there can surely be no reason why the house which has been taken expressly for the benefit of the Society should not be rendered as available as possible for its convenience. Why, indeed, should the funds of the Society be encumbered with a rental of 160*l.* per annum for the next forty years, (exclusive of taxes and parish assessments,) if the Fellows are not to enjoy all the "appliances and means to boot," which such an investment should insure! If their dominion is not to extend beyond the ground floor, what does the Council propose to do with the upper part of the premises, which contains so many large and spacious apartments? Are they to be partitioned off into lumber rooms, or is it intended, peradventure, to convert the establishment into a "model lodging-house?" Lastly, the Fellows have a right to know why they should not be admitted into their own house, or have access to their own library before one o'clock in the day, and then be turned off the steps of their own street door as the clock again strikes five. Assuredly this is scurvy treatment, as if the Society were indeed a mendicant daily lodger, instead of being, as we had fondly imagined, an august impersonation, wearing "the likeness of a Queenly Crown" upon its head, and invested with all the insignia and prestige of a Royal Charter.

THE HOMŒOPATHS.

At length the Homœopaths have built to themselves a hospital, and have elected a staff composed of eleven worthy companions, not of the Order of the Bath, but of the high order of Humbug. We can fancy with how loud a shout these worthies must have uttered "Eureka!" when—not like Archimedes of old, they found the method of testing the excellence of gold, but the real philosopher's stone,—the art of making the precious metal. The desire of notoriety stimulates these gentlemen; their names follow each other in the columns of the *Times* newspaper, at once puffing themselves and advertising their hospital. If a man's name appear pretty often in a daily journal, no matter though he pay the paper for its insertion, the non-professional at last say, "Ah! Dr. So-and-so must be very clever, I have heard of him;"—the how and the where slip the memory, the name alone lives in recollection. We will aid the public, not only in learning the names of the eleven, but also in appreciating their merits. Here is a list of them, and their contributions to the science of medicine appended—if such there be.

J. Chapman, M.D.

M. Roth, M.D.

H. V. Malan, M.D.

D. Wilson, M.R.C.S.E., *i. e.*, Member of Royal College of Surgeons of England, but, in reality, *is* a *licentiate* of the Royal College of Surgeons of Edinburgh, (that college has no members.)

E. C. Chepmell, M.D. Has written a little book on Domestic Homœopathy.

R. E. Dudgeon, M.D., Editor of a homœopathic journal, and writes on homœopathic treatment.

P. F. Curie, M.D. Has written a book on Domestic Homœopathy.

T. E. Engall, M.R.C.S.E.

A. Henriques, M.R.C.S.

J. Hands, M.R.C.S. A writer, we believe, on Mesmerism.

Henry Kelsall, M.D., F.R.C.S.

So that not one has written a line calculated to advance the progress of the science of the profession of which they profess they are heads.

We not long since witnessed the following scene in the shop of a Quaker. Joseph ——, a staunch advocate of the "Early Closing Movement," asked John —— to sign a paper in favour of the same. John refused. "I tell thee, friend John," said Joseph, "it is the love of *cash* that sways thee."

"I tell thee, friend Joseph," replied John, "it is the love of *notoriety* that prompts thee." The members and the fellow of a Royal College of Surgeons who figure in the above list (the others are illegal practitioners, and therefore unworthy of further notice), having failed to gain *the loves*,—*i. e.*, notoriety and cash,—of our two Quakers, by the aid of legitimate medicine, appear to have been stimulated to offer themselves up, for the purpose of securing them, on the shrine of Homœopathy.

THE "ZOIST," A JOURNAL OF CEREBRAL PHYSIOLOGY.

The October Number of the *Zoist* indicates the good effects which have attended our recent castigations of that mendacious Journal. It now appears to be writhing, coiled upon itself, like a wounded snake in its last agonies. There are evidences of its impending dissolution in every article it contains; and, while its limbs are quivering in this enfeebled state, it would be the height of inhumanity to reapply the knout. This organ of fiction set out in a tone of triumph, trumpeting forth its spurious facts under the pretended banner of philosophy; while now and then it waxed eloquent under the inspiration of preaching up its own false doctrines, just as all unprincipled gamblers become the more desperate as the game appears the more losing. But now, feeble and outworn in its dying momeuts, it has scarcely strength to "make a sign," and only sputters out a little delirious abuse on Dr. Todd and others who are beyond its reach.

The Rev. George Sandby, we presume, will pronounce its funeral oration, Dr. Elliotson provide the cash to erect its monument, and we ourselves will write its epitaph.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

THE WALLS OF THE BLOOD-VESSELS.

We condense, from a most able paper by Remak, (*Histologische Bemerkungen über die Blutgefässwande,*) the following observations, which were made on the vessels of men, oxen, sheep, pigs, and rabbits. The author first speaks of the tissues entering into the composition of the walls, and then of the several coats made up from these tissues.—

A. THE TISSUES.

1. *The Epithelium.*—Henle and Schultze have described the epithelial cells of the vessels as frequently *melting* into one another. Remak describes the innermost layer in the aorta of men, oxen, pigs, and sheep, as a simple layer of separate cells. Between these cells and the elastic longitudinal fibrous layer is a tolerably thick layer of flat cells; the outermost layer of these is separated into its component cells only by forcible tearing; yet even here the fusing of the walls of any two adjoining cells into each other appears doubtful. In the pulmonary artery there are as many strata of these epithelial cells as in the aorta, but in the carotids and arteries of equal size there are only two or three strata. The nuclei of the innermost layer have dark outlines, and are granular; those of the outermost layer are homogeneous, and without dark outlines. In the great veins, the epithelium is thinner and softer than in the arteries; often there is only a single stratum, as can be seen best on the valves; sometimes there are two; a fusing of the cells is doubtful. In the little arteries and veins the epithelium is in each nearly the same; there is only a single layer of very thin nucleated cells. In microscopic vessels, there is no epithelium.

2. *The Fibres of Areolar Tissue.*—The description of this tissue does not differ from that given by Reichert, (*Beobachtungen über das Bindegewebe*, 1845.) It is found in all the coats, but is finer and less strong in the inner and middle coats than the outer coat. In the valves of the veins, and under the epithelium in the veins of the neck, it is thick, and has the character of fibrous tissue.

3. *The Elastic Fibres.*—These consist, as is well known, of interweaving fibres of different breadths and thickness. They are usually solid and homogeneous. Remak has observed perforations occurring *in individual fibres* in the aortic arch, the thoracic and the superior aorta of the sheep. These perforations are either linear rows of little holes, like the holes on a flute, or are quadrangular apertures. These perforated fibres are most numerous towards the inner surface of the middle coat, and diminish from within outwards. In some cases, in swine and oxen, Remak found very few fenestrated fibres, or none at all. The broad flattened elastic fibres which form the so-called fenestrated membrane of Henle, are also sometimes individually perforated. The elastic fibres are found in all the coats. Remak confirms the observation of Donders and Jansen, that they exist in the outer coat of some large arteries, forming a layer very similar to the fenestrated layer. He has observed them, also, in the outer walls of the great veins. These last-named fibres are very similar to the elastic fibres which form the internal longitudinal layer which lies next to the epithelium, separating it from the fenestrated layer of Henle, as pointed out by Donders and Jansen, and by Schultze.

4. *The Contractile Fibres, or Plain Muscular Fibres.*—These are flat or round, prolonged or short, spindle-shaped fibres, sometimes hooked or bent at the end. Remak has seen these fibres, both in arteries and veins, not only in the middle, but in the outer and inner coats. In the outer coat, they form, in the great abdominal veins of oxen and sheep, long spindle-shaped or cylindrical bundles, which are visible to the naked eye. Herein Remak differs from Kölliker, who, in arteries, restricts these fibres to the middle coat, with one or two exceptions.

B. THE COATS.

Remak, with Donders and Jansen, Kölliker and Schultze, describes three coats, (exclusive of epithelium,) only he distinguishes these, not from the nature of their component tissues, but from the direction of their fibres.

1. *The Inner Coat.*—Abstracting those cases in which a layer of areolar or fibrous tissue lies next to the epithelium, there follow usually at once on the epithelium the elastic longitudinal fibres, which, when either attached to the middle circular-fibred coat, or when quite detached from this, exhibit longitudinal folds, which are caused, however, by the contraction of the middle coat, and are more marked in arteries than veins, and according to the degree of contraction of the vessel. Some of those fibres are individually perforated as already mentioned.

On these innermost longitudinal elastic fibres follows a perforated membrane.(a) This is removable from these fibres, in such arteries as the carotid, in which it is not separated from the circular-fibred coat by another layer of longitudinal fibres; if it is so separated,—if on its outer side longitudinal fibres intervene between it and the circular fibres, then this fenestrated coat is inseparably connected with the inner longitudinal fibres, as in the renal, mesenteric, splenic, and hepatic arteries and veins. In the smaller arteries, nevertheless, and in many veins, this union between the innermost longitudinal elastic fibres, and the fenestrated membrane occurs, even although this latter is *not* separated by any longitudinal from the circular fibres. The inner coat is then made up of one or two layers of longitudinal elastic fibres, with a fenestrated coat between them, or outside one, if only one exists, and of fibres of areolar tissue.

The inner longitudinal-fibred coat is particularly well marked at the points where branches are given off, and Remak thinks that its office is especially to preserve the patency of the vessels; it is not found in the innominate, carotid, subclavian, and their branches, for here the position of the vessel, and the force of the stream of blood, are sufficient to counteract the contractility of the circular-fibred coat. It is found in the axillary and popliteal, and is very strong in the mesenteric arteries. Remak has found it in the branches of the vena portæ in oxen and sheep, but not in the trunk. In the veins it is only found when the

(a) The description of the fenestrated membrane is perfectly given in Quain and Sharpey's Anatomy. Remak considers with Donders, Jansen, and Schultze, that Henle has committed an *error loci* in placing the fenestrated layer next to the epithelium; it is separated from it always by the longitudinal elastic layer above described.

circular-fibred coat, to which it is as it were antagonistic, is well marked, as in the renal, mesenteric, and hepatic veins (in sheep and oxen).

2. *The middle, or circular-fibred coat*, which is made up of elastic fibres and smooth muscular fibres. Remak confirms previous observations. He corroborates the remark of Kölliker and Schultze, that the number of contractile fibres which is contained in this coat is comparatively small in the aorta, increases in the middle-sized arteries, while in the smaller arterics the middle coat is chiefly composed of such fibres. In the branches of the pulmonary artery there arc more contractile fibres than in the trunk. This middle coat is weaker in veins, and is not found in those of very small size, (under 1-50 lin.) Generally in descending veins it is thicker and richer in contractile fibres than in ascending; it is also thicker in the vicinity of joints, where the vessels are exposed to bendings. (Some interesting observations here follow on its occurrence in various individual veins; but for these we refer to the paper.)

3. *The Outer Coat.*—This is chiefly composed of elastic fibres and fibres of areolar tissue, assuming a longitudinal direction; also in the aorta of men, oxen, sheep, and pigs, can be seen grey bundles in this coat, which are made up of contractile fibres lying among the elastic fibres. In oxen, sheep, and swine, these bundles are found on the abdominal aorta, even to the iliacs, though in diminished amount. In the pulmonary artery and branches of sheep they are very much developed, but are here not always longitudinally arranged; but cross, at sharp angles, the elastic and contractile fibres of the middle coat; therefore, sometimes the limits between the middle and outer coats cannot be well determined. This crossing commences in arteries of the third and fourth grade of size.

In the great veins, especially of the abdomen, these contractile fibres in the outer coat assume a more marked development. In oxen and sheep they are found in the pelvic veins, the hepatic, splenic, mesenteric, renal, iliac, and the vena portæ. They usually run longitudinally, but are sometimes oblique, and so placed that they can narrow or shorten the vessel. After some further remarks on the occurrence of these fibres in veins, Remak observes, that he has seen them in man, in the renal, iliac, crural, splenic, and mesenteric veins, and in the vena portæ. In the hepatic vein the fibres form, not bundles, but a regular layer, divided with difficulty from the circular coat; but in man they are much less conspicuous than in oxen and sheep.—*Müller's Archiv.*, No. 2, 1850, pp. 79 to 101.

THE ARRANGEMENT OF THE BLOOD-VESSELS IN THE MUCOUS MEMBRANE OF THE STOMACH.

The course of the vessels, as far as the point where they pierce the walls of the stomach to pass to their final distribution, is well-known. Their minute distribution has never been perfectly described. It has lately been carefully examined by Frey, in men, dogs, cats, sheep, and guinea-pigs.

1. The veins pass usually obliquely through the muscular coat, and reach the submucous tissue; they bend here into a longitudinal direction, and run at a little distance below the blind extremities of the tubes. They are of large and regular diameter, and frequently anastamose with each other. Frey calls them "basal veins." From these basal veins arise, at right angles, numerous branches, which run in a straight or gently-waved direction to the free surface of the mucous membrane. When they have passed half way through the membrane, they sometimes divide into two branches, which continue in the same course as the parent vessel would have taken. At the free surface of the mucous membrane, these vertical veins give off many branches, which form a net-work. When this occurs there is a most important and sudden diminution in the size of the veins. The basal veins have a diameter from 1-10 to 1-20 of an inch; the vertical branches vary from 1-18 to 1-48; the veins of capillary net-work vary from 1-70 to 1-300.

2. The arteries, like the veins, penetrate the muscular coat obliquely, and pass with the veins till these latter bend to form the "basal veins." They are much smaller than the veins,—not more than one-third or one-fourth of their diameter. They form no vessels corresponding to the basal veins, but divide at once into branches, which freely anastomose; from this net-work branches arise, which pass towards the surface; when they reach the tubes, they pass longitudinally between these, communicating by short cross-branches, coming off at sharp angles; these sometimes form a ring round the tubes, but if a ring is formed at this point, it is irregular and exceptional. When the arteries reach the mouths of the tubes, they divide to form a second net-work, and these branches form rings round each tube, or, more seldom, a ring round two adjoining tubes. From these circles the capillaries pass into the veins.

In this arrangement, (the description of which we have condensed as much as possible,) Frey sees two points very worthy of attention: one is, the sudden enlargement of the veins, so soon below their capillary net-work, which seems especially calculated to promote absorption; the other point is the arterial arrangement, which Frey compares to that of the glomeruli of the kidney, as unfolded by the beautiful researches of Bowman. — *Henle's Zeitschrift—Viert. Bd.*, 1850, pp. 315—328.

GROWTH OF NAILS AND HAIR IN MEN.

The following interesting observations have been made by Berthold, of Göttingen. He found that nails which were cut off, re-formed quicker in children than adults, and in these than in old people; that they formed quicker in summer than in winter, (a nail which in summer would be repaired in 116 days, in winter is repaired in 152;) that the nails of the right hand re-formed quicker than those of the left; that the nails of different fingers re-formed in different times; on both hands, the nail of the middle finger was most quickly re-formed; then those of the ring and index fingers, which were nearly equal; the nails of the thumb and little finger took a much longer time, and the little finger rather the longest, particularly on the left hand.

As regards the hair, Berthold found, that in persons from 16 to 24 years old, whose hair had been cut off for fevers, &c., the length had reached, in two years, from 12 to 16 inches, giving an average of seven lines per month. By cutting off the hairs of the beard (wetted with rain-water only) with a very sharp knife, every 12, 24, or 36 hours, measuring them with the micrometer, and weighing them, Berthold arrived at the following results:—

1. The growth is increased the oftener the hair is cut: thus, the beard cut every 12 hours, grows at the rate of from $5\frac{1}{2}$ to 12 inches a year; cut every 24 hours, it grows at the rate of from 5 to $7\frac{1}{2}$ inches per year; cut every 36 hours, it grows at the rate of from 4 to $6\frac{3}{4}$ inches per year. The weights correspond with these measurements: cut every 12 hours, the yearly weight of the experimenter's beard would be 313 grains; cut every 24 hours, it would be only 280 grains.

2. The hair grows more quickly during the day than at night, and this rule seems quite invariable. About 1-16th more seems to be formed during the day.

3. The growth is quicker in warm weather than in cold, but this rule is less constant on account of the variability of the weather.

The growth of hairs and nails (which, with the epidermoid formations generally, are secretious) coincides with the formation of the other cutaneous secretions, such as the perspiration and the sebaceous formation, which are also greater in summer than in winter, and by day than at night. This seems to be the case not only with these secretions, but also to occur in the cases of the urine, of the bile, and of the carbonic acid given out in respiration.—*Müller Archiv.* No. II. 1850, p. 156—160.

GENERAL CORRESPONDENCE.

ILLEGAL PRACTITIONERS.

[To the Editor of the Medical Times.]

Sir.—A paragraph which appeared in your last Number, headed "County Medical Association," has just been pointed out to me by a professional friend, in which I am uncourteously held up to your readers as an illegal practitioner; and, although I am not going to repel the charge by attempting to claim the title of L.S.A., of which some individuals appear to be so very proud, I must inform the writer of that paragraph, whoever he may be—an L.A.C. no doubt, perhaps an F.R.C.S.—(I hope not)—that were a list of all the illegal but qualified practitioners in the county of Durham drawn out and published in your valuable Journal, I am afraid that the names of many would appear, who, whether as regards

their scientific attainments or their standing in the profession, would throw both Mr. Shaw, who is an L.A.C. be it borne in mind, and myself, infinitely into the shade.

In reference to the legality of the Association, I beg to inform Mr. Shaw, through this medium, that, since the meeting referred to, the opinion of Mr. Patrick, solicitor to the Association, has been confirmed by a barrister of high standing.

In behalf of myself and others who, for want of opportunity, or other circumstances over which, perhaps, like myself, they have had no control, I beg to say, that, although so situated, we do not practise in defiance of the Apothecaries' Company, but pay every respect to it as a legal body; yet we are perfectly aware that there are other qualifications which, although not conferring the same privileges, are equally respectable, and exact as extended an education, and require as rigorous an examination, from those who become candidates for them.

In conclusion, allow me to state, that other arguments than the one advanced in the paragraph alluded to—viz., the illiberality of forming the Association on such a narrow basis—induced me to propose the broad basis on which it has been happily formed; and very important one was—one since advanced to me in conversation by the person who seconded Mr. Shaw's amendment—viz., that he thought it was calculated, as it at present exists, to be of greater benefit to the profession.—I am, Sir, &c.,

FREDERICK D. JONES, M.D., Edin., L.R.C.S.E.

Washington, Sept. 17, 1850.

POISONING BY CYANIDE OF POTASSIUM.

[To the Editor of the Medical Times.]

SIR,—As the cyanide of potassium is now largely employed for the purpose of electro-plating, and as I believe that a case that recently occurred in my neighbourhood is the first in which it has been used as a poison, I beg to forward to you a detailed account of the symptoms.—I am, Sir, &c., GEORGE ROSS.

24, Farringdon-street, Sept. 20, 1850.

On Saturday, the 14th instant, at half-past six p.m., I was called to see a woman, Margaret Pomeroy, residing at No. 1, Brazier's-buildings, who was supposed to have taken poison. When I arrived, I was told that the woman was found dead, in a kneeling attitude, by the side of the bed; but when I saw her she had been lifted on the bed. Her extremities and face were cold, but the trunk was still warm; her arms were rigid and flexed over her chest; the muscles of her neck were also rigid, and her head was thrown back towards her shoulders; her face was very pale, her lips exsanguine; the pupils of the eye natural, but the conjunctiva was injected on the line where the lower eyelid presses upon the conjunctiva, but neither below nor above this line—this injection afterwards disappeared: there was no discolouration of the lips or palate: she had not vomited. Whilst kneeling by the bed, however, she had passed a large quantity of urine, and her fæces, also, had been voided involuntarily. There were no marks of violence upon the body. The woman appeared to be about 30 years of age. I presumed that she had been dead three or four hours.

The question was how, upon the evidence of these external signs, the woman came by her death. The exsanguine condition of the face, and the signs of tetanus were consistent with rupture of a blood-vessel, but this was improbable. I therefore concluded that she had taken some sedative poison. The pallor of face and lips, the tetanus and opisthotonos, indeed the general rigidity of the voluntary muscles, coincident with paralysis of the sphincters and the absence of vomiting, indicated prussic acid as the agent of destruction. On the other hand, after a diligent search, no bottle or cup showing any signs of having contained such a fluid could be found, and it is generally believed, that when this poison is taken its action is so rapid that time is not afforded to secrete the evidence of the crime. Again, it was not likely that the woman, who was very poor, would be able to purchase prussic acid without exciting suspicion of the object, which would be equivalent to its defeat.

On talking over the matter with some medical friends, it was considered more probable that laudanum had been the means employed to shorten life.

On the following Monday, the 16th instant, by order of the Coroner, I performed a *post-mortem examination*.

On opening the chest, the *blood* was found to be perfectly fluid, with a dark venous colour; the *lungs* were healthy but congested.

The auricle and ventricle on the right side of the *heart* were rather dilated, and the left ventricle slightly hypertrophied; the valves were sound; no coagula. There was no disease in this organ sufficient to cause death.

The *kidneys* were natural in structure, but congested; a small quantity of purulent fluid in the pelvis of each kidney.

The *brain* was healthy, but the *pia mater* was *highly congested*, both at the vertex and occiput; there was no fluid in the ventricles.

The *stomach* was, externally, very red; its coats were much thickened, apparently from habits of intemperance; the mucous membrane of the fundus and body was highly congested, red, and tinted in various parts with a dirty yellow, brown, or greenish hue. It was soft and velvety, but not ulcerated. The small intestines, and especially the ilium, were in the same condition, though in the latter the mucous membrane was so soft and pulpy as to be removed by the gentlest pressure of the fingers. The peritoneal membrane covering the intestines had a greenish hue in several places.

These appearances in the stomach were not noticed until the stomach was taken home for examination.

After the *post-mortem* examination was made, my friend, Mr. Dickenson, who assisted me, searched the cupboards for some traces of poison. Several bottles that had contained medicine were found, also a bottle of nitric acid, some bottles containing oil, and a six-ounce bottle half filled with a dark-coloured fluid, which he handed to me to smell, and which I declared to contain laurel water or prussic acid. Ammonia was detected by both, but my friend could not satisfy himself with respect to the odour of prussic acid, and believed it to be laudanum; and, in that case, it was probably some ammoniacal embrocation. I desire to be circumstantial, as the odour, in case of poisoning by prussic acid, is evidence of the most essential importance. In the same cupboard we found a galvanic trough, and the woman was said to be a forger of base coin.

On arriving at home, and opening into the stomach, about three ounces of a thick red fluid were found, giving out a strong ammoniacal odour. Detecting a resemblance between the odour of this fluid and that in the bottle, which we had inadvertently left behind in the cupboard, I fetched the latter for examination and comparison.

Both fluids were strongly alkaline, and yielded the odour of ammonia. The usual trial tests were applied for the discovery of opium, but no traces of this poison could be ascertained. During this examination, however, and after the application of dilute acids, the odour of hydrocyanic acid became very decided, and this was more particularly the case with the fluid in the bottle. I, therefore, tested this fluid for prussic acid, and succeeded in obtaining an abundance of cyanide of silver, insoluble in cold nitric acid, but soluble in the hot acid. From the film of cyanide I also obtained prussian blue, by the process as given in Taylor's work on "Medical Jurisprudence."

The fluid in the stomach was submitted to the same processes, and yielded the same results, although the prussian blue test gave less clear and positive evidence. Nevertheless, the change of colour on the first day's examination was very palpable. Towards the end of the second day, I was unable to ascertain the presence of prussic acid in the fluid of the stomach by the prussian blue test, although cyanide of silver could still be traced. This disappointment I attributed to the evaporation of the hydrocyanic acid. The process of distillation was not resorted to, as time did not permit.

I had thus satisfied my mind that the fluid contained ammonia and prussic acid; but, inasmuch as one may be considered the antidote to the other, it was not likely that the woman would procure both with a suicidal intent, and hence a new difficulty arose. It, however, now occurred to me, that the woman was a forger, and that, as cyanide of potassium is employed in the process of electro-plating, it was presumable that she had taken a solution of this substance as a poison. The fluid had evidently been a very long time in the bottle from the marks upon the sides, and the colour of the original solution would necessarily have undergone a change from partial decomposition.

On re-examining the fluid for cyanide of potassium, I discovered most distinctly all the properties of that compound. It had a dirty greenish brown colour, and a strong odour, which was increased by the addition of acids. The tests already recited proved the presence of hydrocyanic acid, and tartaric acid, which was now employed, yielded a copious precipitate. Hence, there could be no doubt that the woman had taken a portion of this fluid, containing cyanide of potassium.

At the inquest which was subsequently held, the policeman who had searched the room, produced a recipe containing instructions for preparing a mixture of fine gold, aqua regia, nitric acid, hyposulphite of ammonia, and cyanide of potassium. This recipe testifies to the correctness of my analysis.

Remarks.—The pathological evidence of poisoning by *prussic acid* is exhibited in the tetanic convulsions, the paralysis of the sphincters, and the pallid and exsanguine complexion; in the fluidity of the blood and the congestion of the pia mater, and of the organs generally.

The inflammatory lesions of the stomach and intestines were due to the *ammonia*.

Taylor relates two cases of poisoning by the ignorant administration of the cyanide of potassium as a medicine. In one case, 24 grains were taken, and death ensued in three quarters of an hour. In the other case, the man died in a quarter of an hour, from a dose of which the amount is not stated. Hence it is clear that the action of the cyanide of silver is not so rapid as that of the hydrocyanic acid, and that the woman to whom I was called might have had time to cork the bottle and replace it before death. One grain of the cyanide of silver is said to be equivalent to fifteen drops of hydrocyanic acid: and three grains have killed a dog.

The deadly character of this salt should be well understood by workmen engaged in its use; and, since it is now so largely sold as an article of commerce, druggists and others should observe the strictest precautions that they sell it to none but those who can give satisfactory proof that it will be employed for legitimate purposes.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

Sir,—I believe that every man who has paid the smallest attention to the subject, or who feels any interest either in the progress of medical science or the promotion of harmony and good feeling among the several branches of the profession, will admit, that the time has arrived when it has become highly desirable that something should be done to improve the condition of the Royal Medical and Chirurgical Society. The complaints are long and loud; the allegations no vague unsubstantial generalities, but assertions at once definite and intelligible—things which may be proved to be true or false, and which it is at once idle and dangerous any longer to attempt to stifle or disregard.

Among other things, it is said that the Council violate the charter both in spirit and in letter; that in the election of officers the very *form* is illegal; and that, in the selection of the individuals, the intentions of the charter, the rights of the Fellows, and the interests of science are sacrificed to the promotion of private interests; that in aiding this condition of things, there is a clique which will be found equally influential in the abuses of the College of Surgeons. That objections of the *gravest* character lie against the mode in which papers are selected for publication in the "Transactions," and that it is not more vicious in principle than it is occasionally unjust and oppressive in practce: as regards the promotion of harmony in the profession, in very many points this is obviously neglected; and that, especially as regards the treatment of such of the fellows as are in general practice, there is an habitual injustice, for which the charter affords not the shadow of pretext or plea.

That these and many other defects have been elaborately brought before the Council, and at times by some of their own body, but that they have either uniformly refused to amend the defects brought under their consideration, or met them by some counter motion or amendment, which, while it acknowledged the defect, professed to meet it by some measure obviously inefficient for the purpose.

That these and other abuses have at length brought the Society into such a position, that, with the prestige of a Royal Charter, there were only eleven new fellows last year; that the "Transactions," issuing from a body which enrols among its fellows some of the most distinguished of the profession, do not, after supplying each resident fellow with his copy, pay the *expenses of publication*; and in short, that it is well nigh effete as regards the accomplishment of the high purposes for which it is designed—in fact, that the Society is little more than a "great job." Now, Sir, as the season approaches, I propose to examine these matters in a tone at once temperate and uncompromising, to see if we can get at the simple truth. If we do this, something in the form of a remedy will almost certainly suggest itself as we proceed; and, if you should agree in the views to which I may be led, I trust you will give them the powerful aid of your editorial comments.

The charter of the Royal Medical and Chirurgical Society, though not altogether free from objection, happens fortunately to be so clear in relation to the points which bear on the question before us, that it is next to impossible to render the passages either obscure or equivocal. After stating the time and place of the annual general meeting, the charter directs, that the fellows "shall proceed, by method of ballot, to *nominate* and appoint a president of the said society, and such *officers* and *other* members of the Council as may, with the president, form the number of twenty-one, of whom we *have willed* that the Council shall consist," &c. This is sufficiently plain, even if the charter had contained nothing else to fix the meaning of the passage; but, if the possibility of two men interpreting it differently be admitted, no man would, *à priori*, have dreamed of that reading which is practically adopted by the Council, which reading is expressed in their by-law as follows:—"That balloting lists (not *papers*) shall be prepared ("recommended," that is the phrase, not *nominated*) by the Council, and having blank spaces"—for what? Nomination? No; but "for such alterations as any fellow may wish to make in them, shall be laid on the table for the use of the fellows seven days previously to the day of election, and sent to each fellow with the circular summons." Thus, not supplying the fellows with balloting *papers* merely, which, if not necessary, might be convenient, but with lists of *names* also *recommended* by the Council, which, in practice, means invariably *supported* by that body: so that the freedom of election is just that which resides in the expression of a veto to a list long previously arranged. It need scarcely be remarked, to any practical man, that this arrangement essentially vests the election in the Council; and this is sometimes done, but, as we shall show, emphatically avoided in the Medico-Chirurgical Society.

To prove this, it is necessary to examine that clause in the charter which confers on the Council the privilege of making by-laws, and through which the intentions of charters are so constantly defeated.

The clause directs that the Council shall make such by-laws as they shall deem necessary for (now, Mr. Editor, mark the application) regulating the affairs of the Society, and also the *number* and *description* of its officers, and also the time, place, and manner of *electing* and removing (what, Mr. Editor, the Council?—Not at all) but "the fellows of such society, and all such *subordinate* servants, officers, and *attendants* as shall be deemed necessary and useful to the said society." Now, although there is something of the elasticity of charter phraseology in the foregoing, there is one thing which it very carefully excludes from this by-law influence, and that is, any tampering with the mode of *electing* the *Council*. The moment the word "electing" appears, the word "officers" is not only guarded by the word *subordinate*, but by its association with servants and *attendants*. The illegality, therefore, of the present mode of electing the Council, rests on the unquestionable absence of any authority; and it is equally clear that the omission was as intentional as it was judicious. To prove this, Sir, we need only turn to any chartered society in which the mode of election in question is *legally* adopted, and we shall immediately find the distinction we require. The charter of the Royal Institution, for example, expressly confers that power in relation to the election of the Council, (managers,) which that of the Royal Medico-Chirurgical Society for good reasons as distinctly withholds.

Having thus disposed of the question before us, I would observe that few would care about the exertion of this usurped authority if the system worked well; for since there is nothing which the ingenuity of one man can form, which the ingenuity of another may not break through or evade, so practical men care little for theoretical defects, in regard to things which are practically good and useful. As we proceed in our investigation, however, I fear that we shall find the system no less mischievous in practice than it is assailable in principle.

It will be difficult to show that it either promotes the interests of science, the harmony of the profession, or the real advantage of even those whom it would appear to favour. Illustrations are "plentiful as blackberries," and we shall be obliged, however reluctantly, sooner or later, to refer to some of them; on this occasion we will choose an instance from the elections of president; that in which Mr. Vincent was passed over and a junior fellow elected in his stead, with the additional objection, that he was also his junior colleague. It is not necessary to my present purpose, and still less my wish, to contrast the pretensions of Mr. Vincent and Mr. Stanley. It is well known that Mr. Vincent had been surgeon to St. Bartholomew's for nearly half a century; that he was not only held in high respect generally, but that his merits as a practical surgeon had been most highly estimated by no less a man than Abernethy; that a long life had been passed in a large field of experience, and, as I am given to understand, "*sans tache et sans reproche*;" and, although report had not failed to attribute to him, as an *hospital surgeon*, a certain share of jobbery, in lending himself to the "hospital system," yet it had by no means conferred on him the same amount of reputation in this respect as that enjoyed by his junior colleague.

Now, I have no wish to go into the details of this unseemly pro-

ceeding; the angry feelings excited when Mr. Vincent's claims were found to have been unnoticed in the balloting list; on the erroneous reports subsequently circulated as to Mr. Vincent's indifference to the appointment, &c.; suffice it to say, that in the second year, when the re-election of the president is a matter of course, the election was accompanied by the significant result of a larger number of dissentients, I believe, than had ever occurred since the formation of the society; and, from the recurring conversation on the matter, I have little doubt that the views entertained on the subject of a teacher in a school *accepting* an appointment under circumstances, as regarded a senior colleague, of so doubtful a kind, did give rise to very unfavourable impressions in regard to the one candidate, whilst they excited very warm expressions of sympathy towards the other, whom the Council, so far as it was in their power to do, had thus subjected to disrespect and injustice.

I am glad to close this unpleasant subject, and until my next only hope, that the dictum,—"*Jura inventa metu injusti fateare necesse est*," may sooner or later be the ruling spirit in the Royal Medical and Chirurgical Society.—I am, Sir, &c.,

London, Oct. 8th, 1850. SPECTATOR.

STERILITY.

[To the Editor of the Medical Times.]

SIR,—Mr. Burman having stated a case in answer to "M.D.'s" inquiries, respecting malformation in the male organs being a cause of sterility, if you think the following statement worth inserting in your valuable journal you can do so.

About fifteen years since, when attending in the house of a gentleman, he asked me one day to examine his son, then five or six years old. The orifice of the urethra was nearly at the base of the frænum; and observing to the gentleman, that such was a rare instance of variation from natural position, he replied, "But I am so myself;" and true it was, for on examination the cases were perfectly similar. The parent, however, is the father of a large family, and not all by the same female.—I am, Sir, &c.

Leyburn, Sept. 17, 1850. J. TERRY.

[To the Editor of the Medical Times.]

SIR,—In answer to "M.D.'s" inquiry, respecting the influence of hypospadias in producing sterility, I will, with your permission, add to Mr. Burman's case another that was in many respects very similar, and occurred to my notice a few years ago.

I was requested by an anxious mother to examine her baby's genitals, and discovered the urethra terminating by a small opening at the base of the frænum preputir, a slight furrow extending thence along the under part of the glands to the natural situation of the orifice of the urethra. I was told the same condition of parts existed in the father, and, on examination, found that this was the case; so that this instance, besides adding confirmation to the inference naturally to be drawn from Mr. Burman's case, also evidences the tendency to hereditary transmission of this as of other analogous arrests of development.

With "M.D.," I believe this malformation to be pretty frequent. I have seen many persons so deformed: but they have not applied to me on account of the deformity, but to be cured of gonorrhœa, stricture, &c., the deformity being detected during the examination into the other affection.

If impregnation were prevented by it, I think we should be more often consulted on this account. The rarity of such an event, (which I do not remember to have happened to me,) is an additional argument against "M.D.'s" view that it is a frequent cause of sterility.—I am, Sir, &c.,

JAMES HAKES.

Liverpool, September 18, 1850.

DR. BARKER'S CASE OF PREMATURE BIRTH.

[To the Editor of the Medical Times.]

SIR,—Having received several letters from gentlemen wishing to learn further particulars regarding the case of "Premature Birth," published in the *Medical Times* of the 7th inst., I have much pleasure in giving all the information I can through your pages; but at the commencement premising, that, as the child was not expected to live, several particulars were not noted,—such as the measurement of different parts of the body, &c. At birth the eyelids were closed, and did not open till the second day after. I have no note of the membrana pupillaris; but, if I am not mistaken, the pupil was not perfect for at least six weeks. The upper part of the body was tolerably plump; the limbs rather shrivelled. The skin was pliant, and of a purple colour. The nails were hardly visible. She did not take the breast till the third day, having, up till that time, merely got a little sugar and water. On the third day she began to suck, but very feebly. On the fifth day she became yellow, and at the same time very quiet and feeble, which increased up to the eighth day, when the infant was so feeble that her mother fully expected her to die, and leaned over her frequently to listen if she was breathing. After the eighth day—in common parlance, after the "breaking up of the gum"—she became more lively, sucked a little better, and the mother carried her out into the open air a little every day. She did not suck properly for about a month, when she began to suck well; and was suckled, altogether, thirteen months. She had no artificial feeding, except the sugar and water already mentioned. During the first three weeks after birth her bowels were slow, and she had half a drachm of castor-oil almost every alternate day, but did not require it after that period. She did not walk till she was nineteen months old. Although quite healthy, and taking her food well, she was always small and rather puny-looking, till within the last three months, since which time she has become much stouter. I had her weight taken yesterday, (her age being three years and four months,) when it was twenty-nine pounds and a half avoirdupois, not including the weight of her clothes. By the way, I may here mention that the weight given at page 520 was also avoirdupois.

The second notice of Mr. Annan's case, (*Medical Times*, Vol. XVIII. p. 304,) in which the death, four months and eight days after birth, is recorded, had escaped from my memory, till a letter from Mr. Annan, received a few days ago, recalled it.—I am, Sir, &c.,

W. T. BARKER.

Dumfries, Sept. 14, 1850.

SINGULAR CASE OF PREMATURE MATURATION OF THE VACCINE VESICLE.

[To the Editor of the Medical Times.]

SIR,—Having lately perused in the columns of your journal some memoranda on vaccination, and believing that it is by such a record of facts that we are gradually enabled to strengthen our views, I send you the following, as presenting a somewhat novel feature in vaccination. Should you think it of sufficient interest, I should feel obliged by its insertion in your valuable journal. On Aug. 28th I vaccinated, at mid-day, a healthy child, two years old. On calling in on the following evening at six o'clock, (being in attendance on the mother,) I found, to my utter surprise, two fully formed vesicles on the child's arm, so advanced that the one had just burst as the mother raised the child by the arm.

Struck by the singularity of the occurrence, I thought I would try if the matter thus prematurely formed would take effect in another child. I accordingly vaccinated that evening two children from the matter obtained from the child: one aged seven months, the other thirteen months. Eight days afterwards, on the arm of the latter child were two fully formed vesicles, but in the former child no effect had taken place beyond a little redness. I am quite at a loss how to account for this singular freak of nature, except it be the state of the weather, which on these two days was very warm. If any of your numerous correspondents have met with a similar occurrence, perhaps they could furnish me with a solution to this singular case.—I am, Sir, &c.,

JOHN COWEN.

Bewdley, September 10, 1850.

EAST INDIA COMPANY'S REGULATIONS.

[To the Editor of the Medical Times.]

Dr. Scott presents his compliments to the Editor of the *Medical Times*, and begs to observe, that in the regulations for the admission of assistant-surgeons into the service of the East India Company, printed in May last, the candidate is required to produce a certificate of his having diligently attended the practice and *clinical instruction* of the physicians of some general hospital for six months.

As particular attendance to clinical instruction is an additional or new requirement, Dr. Scott will be much obliged by the Editor of the *Medical Times* stating such to be the case as soon as he conveniently can.

13, Stratton-street, October 3, 1850.

REPORTS OF SOCIETIES.

PHARMACEUTICAL SOCIETY.

The first of the evening meetings of this Society was held at 17, Bloomsbury-square, on Wednesday, the 9th inst., and was very numerously attended, Mr. Ince, President, in the chair. The first business of the meeting consisted in distributing the prizes awarded to the pupils at the examinations in the classes of materia medica, chemistry and pharmacy, and botany, at the conclusion of last session.

ON THE USE OF LEAD IN THE MANUFACTURE OF SUGAR.

Mr. Redwood communicated the result of some experiments he had made with the view of ascertaining the action of certain chemical agents upon sulphite of lead. In the discussion which has recently taken place, with reference to the proposed process for purifying sugar by the use of subacetate of lead and the subsequent separation of any excess of lead by sulphurous acid, the advocates for the adoption of this process have contended that, should any portion of lead remain in the sugar, —which the chemists appointed by the Government to investigate the subject, have proved to be the case—yet this, being in the state of sulphite, will be perfectly harmless. This opinion, which is principally founded upon the fact of sulphite of lead being a very insoluble salt, is opposed to that expressed by the medical men, Drs. Pereira, Taylor, and Carpenter, who were consulted by the Government. The object of Mr. Redwood's experiments was, to determine how far sulphite of lead was entitled to the appellation of a stable and insoluble compound when exposed to the action of chemical agents which it would be likely to encounter in the stomach. Sulphite of lead was found to be insoluble in water and in acetic acid. On digesting it in water containing free hydrochloric acid, however, a considerable quantity of the lead was taken into solution, so that the liquid gave a copious precipitate on the addition of hydrosulphuret of ammonia or carbonate of soda. A similar effect was also produced on digesting the sulphite in solution of salammoniac, and, to a slight extent, on digesting it in water acidulated with lactic acid, and in solution of common salt. It was also found that, on digesting sulphate of lead in solution of carbonate of soda, a mutual decomposition was effected, and carbonate of lead formed, so that, on treating the insoluble residue with acetic acid, abundance of lead was obtained in solution.

Dr. Ure stated, that he had had much experience in the manufacture of sugar, and he felt satisfied that the proposed process for purifying sugar with lead could not be practically applied without endangering the public health, especially since it had been shown, that sulphite of lead is not the stable and insoluble compound that it had been represented to be.

Dr. Golding Bird thought it was a great error to assume, that insoluble substances were necessarily inert. Even admitting the insolubility of sulphite of lead, therefore, he should have required strong evidence to prove that it could safely be administered, even in minute doses, in an article of food of daily consumption. He thought too much caution could not be adopted in guarding against the ill-effects which might ensue from the adoption of the process alluded to.

THE MEDICAL AND SURGICAL PRACTITIONERS' SOCIETY.

The members of the Medical and Surgical Practitioners' Society held their first general meeting at the Freemasons' Tavern, on the 3rd instant, to which the profession were generally invited. John Hunter, Esq., of Hart-street, Bloomsbury, was voted to the chair, and explained briefly the objects of the meeting.

The Secretary having read the address of the Provisional Council on their relinquishment of office,

Mr. Ross proposed the first resolution :—

"That this meeting, being convinced of the expediency and usefulness of a central organisation for protecting and promoting the economical interests of the profession, for supplying a medium of communication between its members, and particularly for conducting those business transactions which have hitherto been necessarily committed to the management of private agents unconnected with the medical profession, resolve,—That a society be established, to be styled 'The Medical and Surgical Practitioners' Society,' and that the objects of such society shall be—

"To watch over and promote the general interests of the medical profession, to support its legitimate rights and privileges, and to oppose the encroachments of unqualified practitioners.

"To provide the members of the society with an efficient medium for the speedy collection and recovery of their outstanding debts.

"To negotiate partnerships and the transfers of practices; to procure and supply situations for assistants and pupils, and to conduct such other business transactions as it may be found expedient or desirable to entrust to its management.

"And the formation of a relief fund, to be appropriated to benevolent purposes connected with the medical profession."

He stated that the Provisional Council had called together this meeting; that the principles upon which they would recommend that the society should be formed might receive the most ample consideration. They courted discussion, for they felt convinced that the more the principles were investigated, the more they would be approved. They desired to act with the utmost candour and openness in their dealings with the profession—(hear, hear)—for they would not arrogate a position of which the free voice of the profession had not declared them worthy. They, at least, were determined to respect the resolutions of a public meeting, and would never expose themselves to the reproach of repudiating the declared wishes of their members. He hoped, therefore, that any objection, if there be any, would be offered, so that the future Council might fully understand the wishes of the members. Mr. Ross then illustrated the necessity of such a society; he computed that there might be about 10,000 medical practitioners in England and Wales, and, on the presumption that their average practice amounted to 400*l.* per annum, the nominal annual income of the profession must be estimated at 4,000,000*l.* Now, if only one-tenth of this amount, and he feared that was a low estimate, should be considered as comprising the bad and doubtful debts, there was an aggregate sum, open to recovery, of at least 400,000*l.* per annum from this cause alone. Furthermore, if the losses sustained by the encroachments of illegal practitioners and impostors, by chemists and druggists, who, in some large towns and crowded districts, practise most extensively—by homœopathists, hydropathists, isopathists, and the whole family of German speculators—by the legally accredited quacks, who pay to the Government for stamps from 30,000*l.* to 40,000*l.* per annum, representing another half a million of money in patent medicines alone, and a much larger amount of regular physic—(a laugh)—if the losses sustained by these various causes be added together, it will exhibit a sum equal to at least one-half the whole income of the profession annually sacrificed, because there has been hitherto no proper and effective organisation to defend the just interests of the profession. (Hear, hear.) Was it not highly necessary that some attempt should be made to recover a portion of this enormous loss? Some gentlemen had declared their opinion that there was no necessity for such a society; but he believed that they were either young men who had no practices, and consequently had no accounts, or were old men superannuated from practice, and consequently could not anticipate the probability of future losses—men who were neither in the profession nor out of it. (A laugh.) Again, the medical man is required to attend all cases, at all times and in all places. Wherever the cry of suffering is raised, public opinion requires that he should administer that aid which he alone is qualified to render. The instincts of humanity tax our ready labours. To the honour of the profession be it said, that it has ever been characterised by deeds of charity and benevolence. (Hear, hear.) What we give in charity we give freely; but there are other calls where our aid, liberally accorded, is met by ingratitude and fraud. How often does it happen that a father has been restored to health and to his family, or a child to the affections of a mother's heart, that in a few short months the obligation is forgotten, and the medical attendant is meanly and ungratefully defrauded of his just and perhaps scanty reward. (Hear, hear.) Time is asked, and taken advantage of, to cheat the benefactor. The medical man, moreover, is unsuited by habit, education, and feeling, to insist rigorously upon payment for a debt; it is inconsistent that the same voice that has suggested consolation in suffering should imperatively demand requital for a debt, however just. Every medical man must feel the embarrassment of such a position. Now, here is a society that offers to relieve the medical man of the difficulty and possible odium of such a necessity,—it will do that for him which he is unable to do for himself. In cases of dissolutions of partnership, removals, disablement, and death, this society will undertake the duty of arranging the affairs of the medical man, and save further trouble to the friends. (Hear, hear.) A society that undertakes such important and responsible duties ought to give every security to the profession that these duties will be faithfully and honourably performed. The Society offers that security in its constitution, its code of laws, its repre-

sentative Council, and its guaranteed staff. Let the rules be analysed, and the profession will judge for themselves whether the society deserves confidence and support or not. Mr. Ross then instanced the insecurity of offices conducted by private speculators, exposed at great length the arts and devices by which the Medical Protection Office had succeeded in entrapping the confidence of the profession, and analysed the first prospectus issued by Mr. Breary. He showed that the office, as hitherto conducted, was a deception and something worse, and that, as proposed to be reconstituted, it must inevitably increase the amount of wrong it had already inflicted. He ridiculed the idea of carrying on a society loaded with debt, the amount of which, moreover, was not yet known, and was probably nearer 5000*l.* than 2000*l.* Part of this debt was due to the cousin of Mr. Breary—Mr. Beckett, a lawyer, and part to Mr. Green, a clerk; both of whom had mortgages on the office. These debts must necessarily be paid off by surcharging the commissions; and he asked the members whether they would consent to be mulcted of their hard earnings to pay off Mr. Breary's debts to his cousin and clerk, to his printers and stationers? (Cries of "No, no!") I like that response (continued Mr. Ross), and let the press carry my question to all parts of the country, and every disinterested member of the profession will give the same answer. (Hear, hear.) The learned gentleman then referred to the prospectus recently issued by the self-constituted committee, which, he said, commenced with a calumnious insinuation against the Provisional Council of the Medical and Surgical Practitioners' Society. If the committee meant to say that at the last public meeting of the members of the office the Council of the Medical and Surgical Practitioners' Society were privy to the election of Mr. Jones, one of their own members, to the chair, he indignantly denied the accusation. The act was that of the assembled meeting; and, however satisfied he might be with Mr. Jones's conduct in the chair on that occasion, he for himself sincerely regretted that Mr. Clifton did not take the chair as had been previously determined. At the same time, he protested against the assumption that any knot of gentlemen had a superior right to the members at large to the nomination of a chairman over a meeting of creditors. After some further comments, Mr. Ross referred to the style of the composition, and especially to the grandiloquence of the sentence which characterised Mr. Breary as possessed of "gigantic perseverance and energy." Does it (asked Mr. Ross) evidence gigantic energy to frame a society upon paper, with numerous departments — insurance office, bank, parliamentary fund, — and to fail in every one? to scheme a benevolent fund, and to promise large subscriptions, yet not to subscribe a single shilling; and, if report speak truly, to appropriate to other purposes the subscriptions to that fund, and to make its affairs a jest and a reproach? to spend the subscriptions, the commissions, and even the debts of the members, in personal extravagance, in maintaining a stud of horses and equipages, and in luxurious living? to copy the plan of other societies that have been successfully conducted, and, at the end of two years, by misconduct and malversation, to fail utterly and shamefully, to pillage the members, and bring himself to the verge of bankruptcy, ruin, and disgrace? (Loud cheers.) Mr. Ross then conjured the meeting to consider the merits of the two societies, and to select that which to their judgment shall seem most worthy of confidence, and sat down amid loud applause.

Mr. Lord, in reply to Mr. Ross, denied that the Provisional Committee of the Medical Protection Office had any other objects in view than to protect the members, and enable them to recover their claims out of the future subscriptions.

Mr. Mack, in seconding the motion, observed, that the opposition Committee had given their unqualified approval of the constitution of this society, by borrowing all the main features of its government, in constituting themselves into a society based on the ruins of the Medical Protection Office.

Mr. Lord again rose to defend his colleagues and himself, when an altercation ensued, during which one of the members put the question to Mr. Lord, whether Mr. Breary, who had proved himself wholly unworthy of confidence, was still to be employed in the Medical Protection Office under the new management; when, on being answered in the affirmative, a cry of indignation was raised by the meeting.

Mr. Clark, of Gerard-street, Soho, then addressed the meeting. He deeply deplored to see a division in the profession, who, if they consulted their proper interests, would band together to protect their mutual rights. He had made up his mind to support the Medical and Surgical Practitioners' Society, and hoped to bring with him numerous friends; he told Mr. Lord, that his conviction was, that it was impossible to build another society out of the wreck of the Medical Protection Office, and they were wasting their time and energies. He believed, that a society like the present was much wanted in the profession, and that it would ultimately be a powerful society; and suggested, that if the members of the committee now conducting the affairs of the Medical Protection Office would consult the interests of the profession, they would seek to effect an amalgamation with the Medical and Surgical Practitioners' Society, and would abandon those who had brought ruin upon them, and would adopt the rules and staff of the Medical and Surgical Practitioners' Society; and let five of those gentlemen unite their names with those highly respectable gentlemen sitting at that table. (Great applause.)

Mr. Ross rose to meet the proposition on the part of the Council of the Medical and Surgical Practitioners' Society with great cordiality, but suggested that the details of carrying out such a plan would require consideration. He would be most ready, however, to meet such a proposition, if it was thought proper to act on the suggestion.

Mr. Rogers supported the resolution, and proved by an analysis of the business done by the Medical Protection Office, that there would be an ample increase, if conducted economically, to carry on the society with success.

Mr. Joseph here suggested, that, as no satisfactory arrangements of the kind proposed by Mr. Clark, however desirable, could be carried out at the meeting, that the Chairman should put the original resolution, which, being done, was carried unanimously.

Mr. Barnes then moved the second resolution:—

"That the copy of the rules now presented be approved and adopted, and that such rules do form the constitution of the society." After reviewing the rules, pointing out their equitable spirit, and how well they were calculated to effect the objects of the society, he drew the attention of the meeting to the provision of a benevolent fund, which, under the judicious and economical management of this society, would not prove, he hoped, a mere chimera, and would enable them to make contributions to a large amount to charitable institutions connected with the profession.

Mr. Clarke, of Hackney, seconded the resolution, which was carried unanimously.

Mr. Houseley, in proposing the third resolution, moving the appointment of the Council, Trustees, and Auditors of the society, thanked the Provisional Council for the compliment they had paid him, in confiding so important a resolution to his charge, and took the opportunity of denying that any observation he made at the former meeting of the Medical Protection Office was in any way premeditated. He came there as a hearer; but, as the proceedings of the evening developed a system of gross mismanagement, he ultimately took part in exposing them. He was convinced, from facts which had recently come to his knowledge, it was impossible to complete an accurate statement of the accounts of the Medical Protection Office without a personal inquiry of each member; for instance, accounts were intrusted to the county court department of the office, when arrangements were made with the debtor, instead of instituting proceedings, and the same commission charged as if they had gone regularly through the process of the court. Again, he was prepared to prove that the amounts, for which credit was given in the books, in many cases were much less than the amounts actually received, and he could assure them that they would find Mr. Breary's liabilities nearer 7000*l.* than 2000*l.* He was not at present connected with the Medical and Surgical Practitioners' Society, but he had heard sufficient this evening to induce him to become a member so soon as he could make the necessary private arrangements.

Dr. Clarke, of Notting-hill, made inquiries as to the mode by which they had selected the present Council, being fifteen only, for nomination, which was explained to have been by ballot out of the Provisional Council, who were twenty-one in number, and that, at the next annual meeting, one-third of those now proposed to be appointed, according to the provisions in the rules, would retire.

Mr. Abram seconded the resolution, which was carried unanimously.

Mr. Popham proposed, and Dr. Gibson seconded, a vote of thanks to the Provisional Council, and that their proceedings be confirmed, which resolution was carried. A vote of thanks was then passed to the chair, and the meeting separated.

MEDICAL NEWS.

Royal College of Surgeons.—The Court of Examiners met for the first time this session on the 4th inst., when the following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College:—

Hammond, Joseph Hutchinson, Bridlington Quay, Yorkshire.

Hogg, Jabez, London.
King, Henry Gregory, Kingston, Surrey.
Simpson, Edward, York.
Simpson, George, Bedford-street, Bedford-square.
Thompson, Henry, Croydon, Surrey.
Whitchurch, Rueben, Melton Mowbray, Leicestershire.
Wilson, James, Rossendale, Lancashire.
Wood, Thomas Buchan Hepburn, Broughty Ferry, Forfarshire.

At the same meeting of the Court, Mr. James Whicher passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date June 12, 1846.

Royal College of Physicians.—At the usual quarterly meeting of the *comitia majora*, held September 30, Dr. Peacock was elected a fellow of the College, and Dr. Stevenson, Dr. Ogle, Dr. Tanner, Dr. Kirkes, and Dr. Frassanges, admitted members. Dr. Bullock and Dr. Hoggan, R.N., were admitted extra licentiates.

Military Appointments.—15th Foot—Acting Assistant-surgeon Jones Lamprey, M.B., to be assistant-surgeon, vice O'Flaherty, promoted in the staff. Cape Mounted Riflemen—Surgeon James Clephane Minto, from the Royal Newfoundland Companies, to be surgeon, vice William Cruickshank Eddle, who retires upon half-pay. Royal Newfoundland Companies—Staff-surgeon of the second-class, Sandford M'Vittie Lloyd, M.D., to be surgeon, vice Minto, appointed to the Cape Mounted Riflemen. Hospital Staff—Assistant-surgeon, Thomas H O'Flaherty, from the 15th Foot, to be staff-surgeon of the second class, vice Lloyd, appointed to the Newfoundland Companies.

First Devon Regiment of Yeomanry Cavalry.—To be surgeon, Thomas Stokes Hodge, gent.

Naval Appointments.—Assistant-surgeon Alexander Emslie (1841), Royal Marines, to be surgeon; Thomas J. Layton, M.D. (1838), to be surgeon; assistant-surgeon George H. Edwards (1847) to the Tyne; Assistant-surgeon Edward Pearce, (1847,) to the Tyne store-ship at Devonport.

Obituary.—On the 30th ult., Dr. Robert Grubb, surgeon, of Dalston, aged 55.

Queen's College, Birmingham.—The Michaelmas term of this institution was opened with the usual formalities on Tuesday last. At one o'clock, the Right Hon. Lord Lyttelton, the Principal, took his seat in the Theatre, accompanied by the Vice-Principal, the Rev. Chancellor Law, the distinguished Dean of the Faculty, W. Sands Cox, Esq., the Professors, and very many friends. The Right Hon. the Principal opened the business by observing that it was his intention to address only a few words to that assembly before proceeding to the regular and pleasing duty of the day, namely, the distribution of prizes to those who had honourably distinguished themselves during the past year. The first time he was called upon to perform that function was five years ago. At that time, in 1845, the college had scarcely extended beyond the outline and basis of the first idea, namely, the provision for the students of medicine and surgery, with a due collegiate course of discipline and general instruction. That was still by far the leading and most important object the college had in view. He would not repeat the observations he then made relative to the peculiar importance of affording medical students that provision; but since that time events of great moment had occurred. He believed he presided in a similar manner to the present occasion in that building in 1847, since which time a larger development had been framed for the institution by the able and energetic men who directed its fortunes, for, as for himself, he only gave it an occasional superintendence. He might have attempted some commendation of the system adopted in the college, were it not for the inaugural address delivered by the Rev. Prebendary Gray last year, who had entered so fully into all the points that it would be needless for him (the Principal) to go over the ground again. Referring, therefore, to that address, and looking back to the time that had elapsed since it was delivered, he was not aware of any circumstance of special interest that had occurred which made it necessary for him to add anything to what was then urged. After a lengthened and eloquent address, the noble lord concluded by expressing his great satisfaction, and that of the Council, at the performances of all the young men who had sent in essays and to whom prizes had been awarded, and he would request some of the more distinguished friends of the college to present the young gentlemen to him.

The Rev. Vaughan Thomas acknowledged the kind observations that had fallen from the lips of their noble Principal; and went on to say, that he could not but refer to the high gratification he had experienced in attending the college chapel, where he heard a body of ingenuous youths commencing the labours of the day by habitual prayer to the Almighty. *He could not but reflect that such a thing was unheard of amongst medical students until it was commenced in this institution.* The religious character of the college was its most prominent and beautiful feature, and he must impress upon his hearers that true religion was the surest foundation of success in life.—The Rev. Vaughan Thomas then presented to Messrs. Roland and Blake the Warneford gold medals for essays.

The Rev. Chancellor Law rose and said, that considering the great exertions and industry which had been exercised by all the competitors, he begged leave to add on this occasion an extra prize, which had been adjudged to Mr. Lowe.

The following prizes were then given in succession by J. Piercy, Esq., the noble president, the Rev. G. Richards, the Rev. William Hunt, &c.:—

Gold Medal.—For regularity of attendance at lectures and examinations, and good conduct during three years.—Higgs.

The Wharneford Scholarships.—Franks, Wilkinson.

Professors' Medals—Anatomy.—First medal and certificate, Lowe; second certificate, æq. Darwen, Freer.

Surgery.—First medal and certificate, Darwen; second certificate, Freer.

Medicine.—First certificate, Russell.

Materia Medica.—First medal and certificate, Banks; second certificate, Wilkinson.

Botany.—First medal and certificate, Franks; second certificate, J. Fox.

Forensic Medicine.—First medal and certificate, Russell; second certificate, Wigglesworth.

Midwifery.—First medal and certificate, Wigglesworth; second certificate, Russell.

Demonstrator's Prize.—Lowe, Darwen, Freer, æq.

The Warden's Theological Prize, Senior Class.—Banks. *Junior Class.*—Alban Davies.

The Piercy German Prize.—Lambert.

The French Master's Prize.—Lambert.

Mathematical Tutor's Prize.—Alban Davies.

London University Certificates, Matr. Exam.—First class, Arden, Davies, De Mierre, Webb; second class, Eland, Ffolliot.

Queen of the Belgians.—Sir Robert Carswell, the eminent Chomel, and Dr. Ganeau de Mussey, have been at Ostend attending Her Majesty. The last accounts were very unfavourable.

The Metropolitan Interments Act provided that no lands or new cemeteries should be purchased until six weeks after the issue of advertisements notifying the intention to purchase by the Board of Health. The six weeks have passed away, and the inspectors and some members of the Board are now engaged in the examination of several proposed sites.

The following paragraph appeared in last Sunday's *Observer*, in the Indian News department:—"The disgraceful state of the lunatic asylums causes much discussion, and it is hoped that some philanthropic Member of Parliament will cause the authorities in India to be aroused from their present apathy."

Mr. A. Goodman has bequeathed the sum of 100*l.* to University College Hospital.

Microscopic Demonstrations. — Mr. Quickett has commenced his valuable course of histological demonstrations, and will continue the same every Wednesday at the usual time. Members of the College only are admitted to the course.

Ireland.—Census.—The *Observer*, weekly paper, has lately advocated the justice and reasonableness of appointing medical men to positions under the new census, and in Ireland, we are happy to find, the Government have taken the initiative by the appointment of Dr. Wilde, the eminent writer and late editor of the *Dublin Quarterly*, as one of the Commissioners to arrange the census of 1851. The active part taken by Dr. Wilde in the last census must be fresh in the recollection of our readers.

HEALTH OF LONDON DURING THE WEEK.

The deaths registered in London, in the week ending last Saturday, were 893. In the corresponding weeks of ten years (1840-49) the average was 970, which, if a certain proportion be added for supposed increased of population, becomes 1058; the present rate of mortality, therefore, continues comparatively low, and the decrease of last week amounts to 165 deaths. The class of zymotic or

epidemic diseases exhibit, in this return, 195 fatal cases. This is a lower number than in any corresponding week since that of 1846, when there were 179; in those of the three following years, the deaths from epidemic diseases were respectively 318, 430, and 608. Last week, small-pox was fatal in 10 cases; measles in only 7; hooping-cough in 27; scarlatina in 31. A death from the last-mentioned cause occurred in Mill-street, St. James's, Bermondsey, and Mr. Martin, the registrar, observes, that out of 10 deaths which he registered during the week, 6, arising from various diseases, occurred within a few yards of the tidal-ditch, Jacob's Island; "yet the intolerable nuisance remains unabated." The mortality from diarrhœa and dysentery continues to decline; the deaths which in a week of August rose to 155, have now fallen to 47. It is worthy of note, that 13 deaths occurred in the workhouse, Whitechapel (North sub-district), all, with one exception, between the 27th September and 4th October; and of these, 7 were caused by diarrhœa, 2 by fever, and the remaining 4 by various causes. Seven deaths from cholera (5 of which were among children) were registered last week, a number which is rather more than has been usual lately.

MORTALITY TABLE.

Deaths in the week ending Saturday, Oct. 5, 1850.

(Metropolis.)

Causes of Death.	Oct. 5. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	403	299	190	892	9704
Specified Causes	402	299	189	890	9643
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	140	31	24	195	2744
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	8	18	11	37	537
Tubercular Diseases	66	89	10	165	1683
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	56	32	34	122	1085
Diseases of the Heart and Blood-vessels	4	20	13	37	262
Diseases of the Lungs, and of the other Organs of Respiration	48	24	31	103	982
Diseases of the Stomach, Liver, and other Organs of Digestion	22	30	15	67	692
Diseases of the Kidneys, &c.	...	7	2	9	73
Childbirth, Diseases of the Uterus, &c.	...	7	1	8	95
Rheumatism, Diseases of the Bones, Joints, &c.	...	6	2	8	62
Diseases of the Skin, Cellular Tissue, &c.	...	1	...	1	11
Malformations	2	...	...	2	23
Premature Birth and Debility	14	...	...	14	235
Atrophy	21	2	1	24	168
Age	...	...	33	33	482
Sudden	5	7	5	17	136
Violence, Privation, Cold, and Intemperance	16	25	7	48	373
Causes not Specified	1	...	1	3	61

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Oct. 5, 1850.	Sum of Ten Weeks.
London...	1948369	893	9704
West	301189	123	1414
North	376568	178	1559
Central...	374199	138	1829
East	393067	202	2302
South	503346	252	2600

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	33	Heart	31	Phthisis.....	111
Bronchitis	37	Hooping-cough ...	27	Pneumonia	47
Cholera	7	Hydrocephalus ...	29	Scarlatina	31
Childbirth	5	Influenza	...	Small-pox	10
Convulsions	37	Liver	20	Stomach	5
Diarrhœa	41	Lungs.....	7	Teething	11
Dropsy	11	Measles	7	Typhus	36
Erysipelas	7	Paralysis	20	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	680	465	215
Females	722	428	294
Total.....	1402	893	509

METEOROLOGY OF THE WEEK.

Electricity.*	Nothing was shown at any examination.	Nothing was shown throughout the day.	Negative and very active at 1 p.m. Positive, and tension moderate during the evening.	Positive, and tension strong throughout the day.	Positive, and tension strong during the afternoon, and at night.	Positive, and tension strong at noon, and during the remainder of the day.	Positive, with moderate tension throughout the day.		
Rain in Inches.	0·05	0·17	0·00	0·00	0·03	0·00	0·00	SUM	0·25
Amount of Horizontal Movement of the Air.	Miles. 170	150	140	25	70	55	115	SUM	725
General Direction of Wind.	P.M. S. & W.S.W.	S.W.	N. by W.	N. by W. & W.S.W.	Calm.	Calm.	W.		
	A.M. S.W.	W.	S.W. & N.	N. by W.	W.S.W.	Calm.	Calm.	Variable.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 2·5	— 2·0	— 2·0	— 3·0	— 2·4	— 0·4	— 1·1		— 1·2
Ditto. Dew Point.	49·0	42·5	45·4	45·0	47·6	48·3	48·4		45·9
Mean of Thermometer. Dry.	55·0	51·1	51·6	50·7	51·2	52·9	51·4		52·0
Mean of Barometer.	29·490	29·228	29·274	29·674	29·749	29·721	29·625		29·537
Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...		Means ...

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

The introductory lectures of Mr. Phillips, at the Westminster Hospital, and others, are in type. The crowded state of our columns prevents our publishing in this number these interesting documents. They will appear in our next, and be followed by those we have already announced.

Communications have been received from Mr. R. Thomson J.; Mr. Hawker, of Edward-street, Portman-square; Mr. Wotton; A Subscriber; Dr. Cochrane, of the Lawn-market, Edinburgh; Dr. Forsyth, of Carrickfergus; Mr. Sands Cox, of Birmingham; C. D., of Bristol; A Medical Student; Dr. Venables, of Finsbury-circus; Dr. d'Alex, of Lower Brook-street; Dr. Cullen, of Broad-street-buildings; Inquirer.

Mr. R. Thomson J.—We really cannot inform our correspondent where he "can procure a bed for a bed-ridden friend that has the strapping fixed to the bedstead with vulcanised Indian-rubber." He may, perhaps, apply with success to Mr. Hooper, of Pall-Mall East, who deals much in cushions for the purpose required.

Mr. Hawker's wishes are complied with.

A Subscriber.—A registrar of births, deaths, &c., is not allowed to register a death without a medical certificate.

Dr. Cochrane, of the Lawnmarket, Edinburgh, is thanked.

Dr. Forsyth, of Carrickfergus, is informed that his communication will be published as soon as possible.

C. B., of Bristol, is right. We are fully sensible of the inconvenience, and will use our best endeavour to avoid it.

Dr. Wardrop's Work on the Heart.—In answer to several correspondents, we can only say, that a large part of the remaining portion is now in type, and under revision by the author, and we hope soon to see the conclusion.

A Medical Student.—The work in question is very valuable, but more adapted for the practitioner than the student.

Dr. Venables's promised communication will be very acceptable. It was by a mistake only that he was not written to.

Dr. Cullen.—We will insert any letter upon the subject in question with which Dr. Cullen will favour us.

Inquirer.—We are aware that a report is in circulation—with what truth we do not know—that a great congress of medical men is proposed to be held in France, for the purpose of testing by experiment the virtue of a newly-discovered cure for madness, and for the bites of venomous serpents,—as effectual, it is said, as cod-liver oil in sundry pulmonary diseases. It is said all the different states of Europe will be represented; Russia, by a physician attached to the Court of the Emperor; the German States, by seventeen physicians; and that Sweden, Norway, and Denmark, will send delegates.

ORIGINAL LECTURES.

LECTURES
ON
THE CHEMISTRY OF THE POISONS.

By H. LETHEBY, M.B.,
Lecturer on Chemistry and Toxicology in the London Hospital.

LECTURE XIX.

Phosphorus an Active Poison; Quantities which have destroyed Life.—Its Use, in lieu of Arsenic, in the Preparation of Pastes for Vermin.—Simon's Formula.—Duboys' ditto.—Physical Properties of Phosphorus.—Its Form, Colour, Odour, and Taste.—Its Density, as estimated by different Chemists.—Its Melting and Boiling Points.—Varieties of Phosphorus, as the Clear Transparent, the White Opaque, the Yellow, the Red, and the Black.—Chemical Properties of this Substance.—Its Affinity for Oxygen.—Its Luminosity and Slow Combustion.—Circumstances which affect its Oxidation in Air; Influence of Cold, Pressure, and Gaseous Mixtures.—Firing Point of Phosphorus.—Products of its Combustion in Air.—Origin and Nature of Ozone; Influence of this Body in the Production of Disease; Tests for its Presence in Air.—Combinations of Phosphorus with other Elementary Bodies, as with Chlorine, Bromine, Iodine, and Sulphur.

Brande states, in his Manual of Chemistry, that phosphorus taken in over doses is a poison, but he also remarks, apparently on very good authority, that this substance has been used in medicine in doses of from one to six grains in the course of the day, and that it is said to be a powerful restorative; from which you might, perhaps, be led to conclude, that the activity of this body as a poison is not very great. But the accidents which have already occurred from the reckless employment of phosphorus in medicine, and from the use of it in the manufacture of matches, and in the preparation of pastes for the destruction of vermin, are, I think, sufficient to show that it is a most virulent substance. They prove, in fact, that its action is quite as energetic as that of arsenic, and that it cannot be administered in doses of even a single grain per diem without endangering life. Taylor asserts, on the authority of Gaultier, that less than a grain of it, given in divided doses over a period of four days, has proved fatal. Devergie and Orfila, quoting from a report made by Martin Solon, have related another case in which about three-quarters of a grain, given in an emulsion, killed a man in a few days; and Worbe has narrated a third instance where one grain and a half of this substance, or at most a couple of grains, destroyed an adult in nine days. These facts will, I trust, convince you that phosphorus is not by any means so inactive a poison as Brande and others have imagined.

Looking at this circumstance, and remembering that phosphorus is now a common article of trade, that it is daily in the hands of the careless and ignorant, it is somewhat surprising that it has not been more frequently a source of danger to the community. I make this remark, because you will find that in this country cases of poisoning by it are very unusual; and I may add, that it is hardly ever resorted to for criminal purposes. Not so, however, on the continent;—there, the indiscriminate sale of arsenic (our fashionable poison) being prohibited, the secret murderer is driven to the use of a more accessible drug; and, as nothing is nearer to his hand than phosphorus, it is not to be wondered at that the crime of poisoning by this substance is on the increase,—so says one of the Spanish medical journals, viz., the *Revista Medica*, and I believe the statement to be the expression of truth. Another great reason for the comparative frequency of the crime abroad is to be found in the fact, that ever since the publication of the Prussian Ordinance in 1843, phosphorus has been used on the continent instead of arsenic, in the preparation of pastes for the destruction of vermin. These pastes generally contain from one to two per cent. of the poison; and, though several formulæ have been suggested for the fabrication of them, yet there are only two which deserve especial notice, namely, those by Simon, of Berlin, and Duboys, of Paris. Simon's formula was published in the month of April, 1843, at the request of the Prussian Government; and it runs thus:—Take of phosphorus 8 parts, liquefy it in a mortar with 180 parts of boiling water, and add 100 parts of flour; when cold, mix in 180 parts of butter, and 125 of sugar. Simon states that this mixture will keep good for years, and that it is eagerly devoured by all kinds of vermin. Duboys' recipe is as follows:—Take of phosphorus 20 parts, boiling water, flour, and melted fat, of each 440 parts, mix well together, and then add of nut oil 200 parts, and powdered sugar 250. This compound is more fluid than the last, and is used by spreading it over thin pieces of bread.

With these general remarks, I proceed to consider:—

THE PHYSICAL PROPERTIES OF PHOSPHORUS.

That which is generally met with in commerce is in the form of small cylinders. It is more or less white and opaque on the outer surface; but when recently cut or scraped it looks semitransparent, and has the appearance of pale wax. Its colour varies from a very light yellow up to a deep orange. It is so soft that it can be indented and cut with the finger nail; and though it is, when roughly handled, exceedingly brittle, yet it can, with a little care, be bent into a curved form. When crystallised out of its strong solutions, it assumes the form of rhombic dodecahedra, but when it is crystallised by fusion and slow cooling, the form is more frequently that of regular octahedra.

The odour of phosphorus is generally said to be like that of garlic, but, in my opinion, it is quite peculiar; you must have recognised it very often in fusees and lucifer matches. Schönbein states that the smell is not due to the vapour of phosphorus, but to the presence of ozone and phosphorus acid.

In the solid condition, phosphorus is nearly tasteless, but when in solution it has a sharp, pungent flavour, which is very disagreeable.

The specific gravity of this substance has been variously computed. Böttger estimates it at 2089, Fourcroy at 2033, Böckman at 1896, Schrötter at from 1826 to 1840, while Thomson, Davy, Ure, Orfila, Rose, and most English chemists, have rated it as low as 1770. According to my own experiments, the density of commercial phosphorus ranges between 1848 and 1853.

With regard to its thermotic properties, phosphorus may be said to be a non-conductor of heat, and to be fusible at somewhere about the temperature of the human body. Sir H. Davy has said that it melts at 90° Fah.; Rose and Ure, at 95°; Vogel, at 96.5°: Pelletier and Thompson at 99°; Brande, at 105°; Graham, at 108°; Orfila, at 110°; Desaines and Person, at 111·5°; J. Davy, at 112°; Schrötter, at 113°; and Henrich, at 115°. These discrepancies are very considerable; I have therefore been at some pains to discover the exact point at which the phosphorus of English commerce melts. You will perceive that it does so at a temperature of 114° Fah. In trying this experiment, however, you must take care to keep the phosphorus in constant motion under the water in which it is liquefied, or you will find that it may often be cooled down to the temperature of from 65° to 70° without its re-assuming the solid form.

In dry, non-combustible gases, phosphorus begins to volatilise at about 217° Fah.; and it boils at a temperature of 550°; Henrich says, at 482°; while Pelletier, Ure, and Brande say at 554°. If, however, a quantity of water is present it is volatilised at a much lower heat, and, as you may here see, it escapes with the steam, giving the latter a bright, luminous appearance. Some of the older chemists have stated, that phosphorus is volatile at ordinary temperatures, and they have done much to establish the truth of their assertion, by showing that its vapour becomes diffused through a great many gases, as for example, through oxygen, nitrogen, hydrogen, carbonic acid, &c., endowing them with a peculiar odour, with an increase of bulk, and with the faculty of emitting a faint spectral light when they are mixed with atmospheric air. These results have been obtained chiefly

by the researches of Göttling, Vauquelin, Brugnatelli, Fourcroy, Berthollet, Davy, and Brunner.

VARIETIES OF PHOSPHORUS.

The description which I have just given applies to the ordinary or commercial form of this substance, but I have now to state, that phosphorus has the power of assuming a variety of forms, and of exhibiting under these circumstances so many distinct characters, that it is necessary for me to refer to them. Exclusive of the crystalline and white pulverulent kinds, the following are deserving of notice.

1st. *The Clear Transparent Variety.*—This is obtained by fusing pure phosphorus, and allowing it to cool very gradually in a rather rough vessel. I have noticed, that the presence of a weak acid liquor favours the production of this glass-like variety; and Wöhler has remarked, that it may always be obtained by melting phosphorus under a strong solution of bichromate of potash.

2nd. *The White Opaque Kind.*—This is frequently denominated *Rose's phosphorus*, from the circumstance, that M. Rose, of Berlin, was the first to describe its actual nature. You will notice, that when ordinary phosphorus has been kept for some time under water, and has been freely exposed to the action of daylight, a crust of an opaque white colour forms upon the surface of every cylinder. This is the variety to which I am alluding. The Messrs. Coiquet, who are large manufacturers of phosphorus, state, that the crust forms most readily in waters which contain an abundance of calcareous salts. It differs from ordinary phosphorus, not only in its appearance, but also in its being specifically lighter (1515) and in its having but little disposition to combine with bisulphuret of carbon. Some chemists continue to regard this body as a compound substance. Pelouze has described it as a hydrate, and Mulder regards it as a compound of phosphoric oxide and phosphuretted hydrogen, but the researches of Rose and Marchand have clearly demonstrated, that it is pure phosphorus in an allotropic state; for, by exposing it to a heat of 112°, it liquefies without evolving any gaseous matter, and without losing weight. Gmelin is of opinion, that the formation of this substance may be explained on the supposition, that phosphorus, under the influence of light, decomposes water, producing phosphoric oxide and phosphuretted hydrogen, and that, in the dark, these two compounds are again resolved into water and finely divided phosphorus.

3rd. *The yellow semitransparent form* has been considered by Napoli to be a distinct variety. The coloration and opacity are not, he says, dependent on any impurity, but on a peculiar molecular condition. Wöhler, moreover, states that by melting it under a solution of bichromate of potash, it becomes clear and colourless, like glass. This variety may be obtained by exposing phosphorus to the action of light under recently distilled water, the access of air being carefully guarded against.

4th. The *red variety*, or, as we may perhaps term it, *Schrötter's phosphorus*, because this chemist has carefully inquired into its nature, and described the circumstances under which it is most usually formed, is produced in great abundance whenever phosphorus is exposed for any length of time to a temperature of from 460° to 480° Fah., in an atmosphere in which it cannot oxidise, as, for example, in hydrogen, nitrogen, or carbonic acid gas. It presents itself in the form of an amorphous powder, having a scarlet or carmine colour. Its density amounts to 1964, which is considerably above that of ordinary phosphorus. It is not luminous in the dark, until it is heated to near its firing point, (500° Fah.); and, if it be treated with the solvents for common phosphorus, it is found to resist their action. When heated to a high temperature, it is resolved into ordinary phosphorus, which distils over, and, according to Wöhler, it may, like the last variety, be converted into transparent phosphorus, by fusing it in a concentrated solution of bichromate of potash.

5th. *Thenard's black phosphorus* is considered by most chemists to be another form of this substance. It is produced, according to Thenard, when ordinary phosphorus is melted and then suddenly cooled to a temperature of 32°. Schrötter states, that it may also be obtained by boiling the red variety with weak liquor potassæ; and Osann has recently confirmed a statement made by Thenard, namely, that black phosphorus may be procured by heating any of the other varieties with a strong solution of phosphoric acid. The last-named author has, moreover, shown that many of the commercial samples of phosphorus take on a black colour, in consequence of the presence of copper. Thenard's phosphorus loses its dark colour by fusion and slow cooling, or by digesting it for a short time in warm alcohol or oil.

CHEMICAL PROPERTIES OF THIS SUBSTANCE.

Phosphorus has a great affinity for oxygen, so much so, that when it is exposed to a damp atmosphere, it combines with the oxygen, and undergoes a process of slow combustion. During this union it evolves a white vapour, which is luminous in a dark room. Under ordinary circumstances but little heat is produced during the process; but, if the weather is warm or the phosphorus is supported on some imperfect conductor, it is not unusual for it to liquefy and then burst into flame. This dangerous property is easily demonstrated by placing a few fragments of phosphorus on a little cotton-wool, or by surrounding them with lampblack, rosin, magnesia, or any other non-conducting powder, and then, as you here see, the phosphorus rapidly takes fire. I have noticed, moreover, that when phosphorus has been smeared with olive-oil, previous to its being wiped with a cloth, it has a great disposition to ignite spontaneously. Another circumstance which tends to facilitate the ignition of this body is a fine division of it. This is evidenced by the fact, that small particles of cut phosphorus will take fire much more readily than large ones; and, if you effect a very minute division of it, as by dissolving it in bisulphuret of carbon, and then sprinkling the solution on a piece of cloth or unsized paper, it will inflame directly it comes into contact with atmospheric oxygen; that is, directly the whole of the volatile solvent has evaporated away. Chemists have long since taken advantage of this ready inflammability of finely divided phosphorus, and have made it available, as a means of producing speedy combustion. You may have seen some of the old-fashioned contrivances which went by the name of *phosphorus boxes*. These generally contained a mixture of phosphorus, with some oleaginous, pulverulent, or hygrometric body, which served to divide it. Sultzer's compound, for example, consisted of thirty grains of phosphorus and ten of wax, melted and mixed together at a high temperature. On exposing a small quantity of this mixture to the air, on the end of a sulphur match, it quickly took fire, and inflamed the wood.

A knowledge of the phenomena which are produced during the *slow combustion* of phosphorus in atmospheric air, and of the circumstances which influence their development, are of considerable importance to you; for they may serve, not only to elucidate the cause of that terrible disease to which I have so recently referred, but also to suggest a means of checking, if not of totally preventing, its manifestation; and I may add, moreover, that they are of considerable interest to you, even in a chemical point of view; let us, therefore, proceed to examine them.

(a) *Circumstances which affect the Oxidation of Phosphorus in Air.*—Among the many authorities who have devoted attention to the study of these phenomena are to be found the names of Graham, Davy, and Vogel. These chemists have noticed that the luminosity or slow combustion of phosphorus is affected by a great variety of circumstances, as, for instance, by temperature, by atmospheric pressure, and by the presence of certain gases and vapours. They state that, at a cold of 32° Fah., phosphorus ceases to shine in the dark, but that, at a temperature of 40° to 44°, it becomes faintly luminous; and that above this, even up to the firing point, its luminosity is in a direct ratio with the heat to which it is exposed. Again, all experimenters have remarked that the phosphorescence of this substance is influenced to a very great extent by the pressure of the surrounding atmosphere. They have observed, for example, that when the air is rarefied above its natural condition, phosphorus shines in it with increased brilliancy; and, conversely, when it is made more dense, the slow combustion of this body is altogether checked. In fact, at a pressure of about four atmospheres phosphorus may be liquefied and even partially sublimed in air, without undergoing any very great amount of oxidation. But the most remarkable of all the influences to which I have referred is that which is exerted by the following gases and vapours:—pure dry oxygen, impure hydrogen, bromine, chlorine, iodine, sulphurous acid, nitrous acid, nitric oxide, phosphuretted hydrogen, sulphuretted hydrogen, ether, alcohol, sulphuret of carbon, olefiant gas, coal gas, eupion, naphtha, creosote, turpentine, and most volatile oils,—all of which tend, by their presence, to put a stop to the oxidation of phosphorus in air. The facts connected

with this part of the inquiry have been made out chiefly by the researches of Graham and Vogel, and they are of so much importance, that I shall present them to you in a tabular form :—

Proportions in which certain Gases and Vapours stop the Slow Combustion of Phosphorus in Air at ordinary Temperatures and Pressures.

Name of the Gas.	Proportions in the Air by Volume.	Temperature when the Luminosity ceases.
Sulphuretted Hydrogen	$\frac{1}{5}$	66° F.
Sulphhurous Acid.....	$\frac{1}{11}$	45° ,,
Chlorine	$\frac{1}{12}$	54° ,,
Chlorine	$\frac{1}{23}$	66° ,,
Ether	$\frac{1}{150}$	66° ,,
Olefiant	$\frac{1}{450}$	66° ,,
Phosphuretted Hydrogen	$\frac{1}{1000}$	66° ,,
Naptha	$\frac{1}{1820}$	66° ,,
Oil of Turpentine	$\frac{1}{4444}$	66° ,,

And, judging from the experiments of Vogel, it may be said that a mere trace of sulphuret of carbon is sufficient to prevent the slow oxidation of this substance; for he states, that if a drop of it be poured on paper, and a slip cut from this paper be rapidly introduced into a bell-glass in which phosphorus is shining, the light of it is instantly extinguished; —he remarks, moreover, that the influence of this vapour is so great, that the phosphorus may be raised to the temperature of 96·5 Fah., or even higher without its undergoing oxidation; from which he concludes, that sulphuret of carbon is one of the fittest substances for preventing the slow combustion of phosphorus.

In experimenting with these vapours at a higher temperature it is necessary to use a larger proportion of them in order to keep down the luminosity of phosphorus. This fact is illustrated in the following table :—

Quantities of Vapour required to check the Luminosity of Phosphorus in Air at elevated Temperatures.

Vapour used.	Proportions in the Air by Volume.	Temperature at which Oxidation ceases.
Olefiant gas	$\frac{1}{2}$	200° F.
Ether	$\frac{1}{2}$	215° ,,
Ether	$\frac{2}{3}$	220° ,,
Naptha	$\frac{1}{112}$	170° ,,
Turpentine.....	$\frac{1}{150}$	186° ,,

And in an atmosphere containing a larger proportion of naphtha or turpentine, the phosphorus may be distilled without taking fire.

I am not quite prepared to tell you how these gases and vapours operate in checking the combustion of phosphorus, but there is every reason to believe that they do so by appropriating the oxygen of the air. Mr. Graham accounts for the phenomena in this way, and says that when two oxidisable bodies are in contact, one of them often takes precedence in combining with oxygen to the entire exclusion of the other; and he reminds us, that potassium is also defended from oxidation in the air by these vapours, although to a less degree. Vogel, however, is of opinion that these facts may be explained in another way. He admits that the luminosity of phosphorus is dependent on its union with oxygen, but he states that if there be in the air gases or vapours for which the phosphorus has a greater affinity than it has for oxygen, it unites in preference with these bodies, and, consequently, cannot become luminous. In support of this view, he mentions the fact, that phosphorus is soluble in olefiant gas, naphtha, turpentine, &c. Schönbein is disposed to think that the luminosity of this substance is most intimately connected with the production of ozone; for he remarks, that anything which tends to prevent the formation of this compound, as for instance the exclusion of moisture, the reduction of temperature, or the presence of a deoxidising body, will instantly check phosphorescence; on the contrary, everything which has a tendency to facilitate its production, as for example the influence of heat or electricity, the presence of platinum black, or finely divided silver, will at once restore or increase it. Apart, however, from these considerations, it is satisfactory to know that the vapour of a cheap volatile hydro-carbon (turpentine) has the power of putting a stop to the oxidation of phosphorus, and perhaps also to the formation of those compounds which are concerned in the production of lucifer disease.

Before I quit this part of the subject, I ought to tell you, that there are certain other gases and vapours—namely, nitrogen, carbonic acid, carbonic oxide, pure hydrogen, muriatic acid, ammonia, and the vapours of sulphur, sulphuric acid, and acetic acid—which do not appear to exert any influence whatever over the luminosity of phosphorus. It is a curious fact, too, that phosphorus will not shine in pure oxygen, unless the gas is rarefied, or heated, or else mixed with some other negative element, as with nitrogen, hydrogen, carbonic acid, &c.

When phosphorus is heated in atmospheric air, it takes fire, and burns with the evolution of an intensely bright yellow light. The temperature at which this phenomenon occurs is not very accurately determined: Ure says that it takes place at a heat of 165° Fah.; Sir H. Davy and Dr. Thompson, at about 148°; Graham, at a little below 140°; and Higgins has stated that it fires at as low a temperature as 60°. I will not pretend to reconcile these discrepancies, but will endeavour to show you, that the phosphorus of commerce takes fire at a temperature of 140° Fah.; and you will be good enough to remark, that the combustible melts some time before it ignites, proving that its inflaming point must be a long way above the degree mentioned by Higgins. As I have already told you, phosphorus fires at a lower temperature than the preceding when it is mixed with phosphoric oxide,—a circumstance which may in some measure explain the differences to which I have just alluded. Moreover, according to Vogel, this substance fuses and enters into combustion with great facility when the air is charged with certain foreign gases, as with chlorine, bromine, and sulphurous acid: in the first case, it fires at a heat of 46·5° Fah.; and in the two other, at a temperature of 64°.

(b) *Products of the Combustion of Phosphorus in Air.*—The white fumes which are evolved during the spontaneous oxidation of this body in atmospheric air, consist chiefly of phosphorous acid, but they also contain variable proportions of hypophosphorous and phosphoric acids. It is chiefly to the presence of these acids that the vapour of phosphorus owes its property of reddening litmus, and of darkening a solution of nitrate of silver; but you will find that there is another compound produced, which has the power of bleaching litmus. This compound has the faculty of decolorising indigo, of rendering a solution of guaiacum blue, of giving a violet tint to a mixture of starch and iodide of potassium, and of converting the basic salts of lead and the protosalts of manganese into a higher state of oxidation. These effects are easily shown by directing a stream of phosphorised air upon some strips of white filtering paper, moistened with the re-agents in question; or they may be exhibited in a very satisfactory manner by suspending the moistened paper in a large bottle containing a few fragments of damp phosphorus. The compound which produces these effects has been named *ozone*. Schönbein was the first to study its properties, and he gave it the name of ozone, on account of its very peculiar odour. Recently, other chemists, among whom may be mentioned Williamson, Marignac, Berzelius, Osann, and De la Rive, have inquired into its nature and origin, and have discovered that it is produced under a great variety of circumstances. They have found that it is generated during the movements of the electrical machine, during the voltaic decomposition of water, during the slow oxidation of ether, during the rapid combustion of hydrogen, coal-gas, and tallow, and during the oxidation of metals by nitric acid. I am not able to inform you concerning the precise nature of this body; for, while Schönbein, Williamson, and some others are of opinion that it is a compound of oxygen and hydrogen, in the proportion of 2 of the former to 1 of the latter. Berzelius, Marignac, De la Rive, and Osann, are disposed to think that it is merely oxygen in an active condition. The former view is, in all probability, the correct one; and it might be said that ozone is formed by the union of nascent oxygen with water, or with the elements of water. Wil-

liamson believes that the combination results from the transference of chemical action, during the oxidation of certain bodies, to the neighbouring molecules of oxygen. The properties of ozone are very nearly allied to those possessed by chlorine and bromine; for the latter substances exhibit all the reactions to which I have but just now directed your attention; and, in addition to these, they have, like ozone, the power of converting iodine into iodic acid, sulphurous acid into sulphuric, and of changing yellow prussiate of potash into red, white cyanide of iron into blue, and the proto salts of iron, lead, and manganese into the per.

According to Marignac, it is decomposed by a heat of from 570° to 750°, and is completely absorbed and destroyed by a solution of iodide of potassium, and by the presence of sulphuretted hydrogen, carburetted hydrogen, and most decomposing organic substances. It is not, however, affected by water, sulphuric acid, chloride of calcium, ammonia, or the caustic alkaline earths. It parts with oxygen with great facility, and hence it attacks organic compounds and the ordinary metals; powdered silver absorbs so much of it that it is converted into a deep brown peroxide.

Schönbein states, that the most delicate test for the recognition of ozone is a drop of protosulphate of manganese placed on a strip of white filtering-paper, which rapidly acquires a deep brown colour in consequence of the formation of the hydrated peroxide of this metal. Solutions of manganese may, in this way, be used as sympathetic inks; and, should the colour disappear after a time, it may be immediately restored by subjecting it to the renewed action of ozonised air. It sometimes happens, however, that the salt acquires a columbine red colour, from the formation of a higher oxide of the metal. Another test for the compound is, a paste consisting of about one drachm of white starch boiled for a few minutes in an ounce of water, and then mixed with twelve grains of iodide of potassium. A little of this smeared on white paper becomes blue when it is subjected to the influence of ozone.

Most experimenters have noticed, that air charged with this compound is very disagreeable to animals; for it produces great difficulty of breathing, and after a time kills them. Schönbein was once seriously affected by inhaling it. He is of opinion, that it exists at all times in the atmosphere, and is occasionally the cause of epidemic disease; for during the summer of 1847, he remarked that the catarrhal affections so prevalent during that period at Basle were always accompanied by a great increase in the proportion of atmospheric ozone. More recently, Dr. Spenglers, of Roggendorf, M. Quételet, of Brussels, and Dr. Moffatt, of this country, have, to a great extent, confirmed his results. It has even been asserted, that ozone is the cause of cholera. We, however, have nothing to do with these hypotheses, though I am bound to remind you that ozone is a very active agent, and that it might be concerned, to a greater or less extent, in the production of phosphorus disease.

When phosphorus is ignited in air, it produces a great quantity of phosphoric acid which escapes as a white smoke. This acid frequently condenses on neighbouring objects, and in this way prevents them from taking fire when they are brought into contact with burning phosphorus. You will find, for example, that it is not easy to ignite paper at such a flame, and that if you drop powdered phosphorus, or the sulphuretted solution of it, on a piece of cotton, paper, or cloth, the phosphorus will soon take fire, but the flame will not spread to the surrounding material. Lastly, there is another fact of some importance to you, namely, that when burning phosphorus is brought into contact with the living textures, it produces a burn of great severity. This is occasioned, not merely by the heat which is developed, but also by the deposition of phosphoric acid, a substance that acts as a powerful local irritant. Taking advantage of this property, Paillard has recommended the use of phosphorus as a caustic in place of moxa, and he states that it is convenient and safe. In cases of accident, the phosphoric acid should be removed, or rather neutralized, by mild alkaline lotions.

Finally, *with regard to the combination of phosphorus with other elementary bodies*, it may be said, that it is attacked, even at ordinary temperatures, by *chlorine*, *bromine*, and *iodine*, the reactions being accompanied with the evolution of light and heat, and also with the formation of acrid, irritating, poisonous compounds. When phosphorus is melted with sulphur, it combines with it in all proportions, and occasionally it evolves so much heat and vapour during the combination, that the experiment of fusing them together is attended with danger. In 1843, Berzelius met with a serious accident from this cause; and I mention it because you may have heard of a suggestion lately made for the manufacture of a lucifer composition with these two bodies. If sulphur and phosphorus are ever melted together in any quantity, it should always be done under water.

In the next lecture, we shall proceed to consider the action of compound substances on this body.

LECTURES
INTRODUCTORY TO THE LONDON COURSE OF MEDICAL STUDY.

WESTMINSTER HOSPITAL.

By BENJAMIN PHILLIPS, Esq., F.R.S.
SURGEON TO THE HOSPITAL.

I appear before you to-day, in obedience to a custom which has long prevailed of commencing the sessional business of medical schools with an introductory lecture. I have not been selected for the office, in consequence of any particular fitness I possess for the discharge of its duties, but because it is my fortune to teach one of those subjects which are supposed to stamp upon its professor the privilege, such as it is, of being regarded as a senior. I appear, too, under the disadvantage of having to reap a scanty harvest from a much exhausted field. Some latitude is, however, allowed to the lecturer in the choice of the means by which the lecture may be made most instructive and most interesting. Still custom has made the limits of selection very narrow. Commonly the lecture consists either of a simple history of the progress of medicine, a general introduction to the study of medicine, or an introduction to a particular course of lectures. I do not propose to follow strictly either plan, because each path is so well trodden that little is to be found on the surface, and because I think it hardly fair to inflict on a mixed audience the details of an exclusive science.

I propose to inquire shortly what was the state of medicine in the earlier portion of the world's history, what was its condition in the middle ages, and what is its state in our own times. This inquiry will elicit an answer to the question, what progress has it made, and what benefits has it conferred on humanity? for this is the ultimate object of medical science. Having, as far as may be, satisfied our minds on these points, if it should happen that large benefits to society have been the results of the laborious cultivation of the healing art, I shall inquire what acknowledgment society makes for the boon she receives. To accomplish this object effectually something must be said of the early history of medicine; but I trust what I shall say will not be enough to make the lecture tedious or fatiguing.

If, then, we glance over the early history of medicine, we find, as in other sciences, so in this, that before the historical period it is borne down by much that is fabulous, and that it is often difficult to separate truth from error; therefore, to make our steps assured, we are obliged to pass very lightly over its history before the time of Hippocrates.

The infirmities of our nature would naturally lead those who suffered from sickness, to seek relief wherever it was promised or could be found; it is fair, then, to admit that in some shape or other the healing art has been practised almost ever since man's physical sufferings required relief. But in early times the practice was empirical—it was a simple application of a remedy which was known to, or thought to, be capable of affording relief to suffering, while no accurate knowledge was possessed of the nature of the disease or the mode of action of the remedy. I would not, however, have it understood, that in early times the careful observation of all diseases was utterly disregarded, for even in the books of the Old Testament we find very careful descriptions of the leprosy of Syria. Again, that medicine in a state of greater advancement was practised in very early times, would seem to be proved by another circumstance, that on the ruined walls of the renowned temples of Ancient Thebes bas-reliefs have been found displaying surgical operations and surgical instruments not far different from some in use in modern times. Still it is clear, that when God's communications with his

creatures were more direct than they are in our own days, supernatural agents were by no means the uncommon modes of curing disease.

That comparatively rational means of curing disease were in use among the Hindoos and Chinese, is made evident by the books of Susruta; they were able, among other things, to save the lives of persons bitten by the venomous serpents of the country, and to prevent the occurrence of the scars of small-pox, which we are unable to do in the present day. Indeed, Clement of Alexandria maintained that medicine, such as it was practised in his day, was derived to a greater extent from the Hindoos than the Greeks.

The early Greek poets make many allusions to medicine and surgery. Homer describes the surgical achievements of the sons of Æsculapius before the walls of Troy, which fell 1184 B.C.; but what confidence can we place in those accounts, when the whole affair is so legendary, that it has been questioned whether Troy ever underwent a ten years' siege at all? In truth, when we search into the history of the dawn of science in Greece, the first writings on medicine we meet with are those of Hippocrates. This origin for medicine can be made out by existing records; but we can proceed no further back with certainty. I do not mean to say that it was not cultivated at an earlier period, nor that numerous works may not have been written at an earlier period. All I maintain is, that while all the works that may have been written before the time of Hippocrates have perished, the works of Hippocrates alone have escaped destruction. And singular enough it is, that the void is as striking for centuries after as before his time, even up to the time of the establishment of the school of Alexandria. And this complete isolation gives to the writings a peculiar lustre; indeed, for a time, it induced the belief that the practice of medicine was created by Hippocrates. That was unquestionably an error, for the collection of Hippocratic writings was undoubtedly preceded by researches which were not without fruit, and of which traces may still be found.

The sources from which a knowledge of medicine was derived in Greece before his time are three:—The colleges of the priest-physicians, who ministered in the temples of Æsculapius, and were known as the Asclepiades (those men seem to have registered cases of disease, as well as the treatment employed;) the philosophers and physiologists, who were occupied with the study of nature; and the chiefs of the Gymnasia, who devoted much attention to the influence of exercise and aliments upon health and activity.

Histomaque dates the birth of Hippocrates in the first year of the 80th Olympiad, consequently 460 B.C.; and it is stated that he died at Larissa, aged 85, 90, 104, 109—for so much do the accounts of his age differ.

The life of Hippocrates extended therefore from 460 to probably over 370 B.C., and the state of medicine in Greece in that period is illustrated by the works which bear his name. It is not probable that the whole collection was the fruit of his genius; indeed, of the whole number of works which bear his name, the following only are now regarded as being incontestably his own:—Ancient Medicine, Prognostics, Aphorisms, the first and third books of the Epidemics, Regimen in Acute Diseases, Airs, Waters, and Places, Joints, Fractures, Machines for Reduction, the Oath and the Law. It is not necessary for our purpose to discuss the question, whether those or more than those are the undoubted works of Hippocrates. Whether he was the originator of all the ideas on disease which are to be found in the works which have been attributed to him or not is immaterial to our present purpose. All that is necessary for us to know is, that between the fourth and fifth centuries B.C., medical knowledge had arrived at such a state of advancement, as is represented by the works attributed to Hippocrates. That period of Greek history was indeed a palmy, an Augustan period—a period of wonderful mental development in the few, while gross darkness prevailed over the many. It was the time of Pericles, of Phidias and of Praxiteles, of Zeuxis and Apelles, of Euripides and Aristophanes, of Thucydides, of Socrates, and of Hippocrates. These great men then illustrated the knowledge of the few at that time; they were suns in the firmament, and, like it in its descent, they left a twilight or darkness behind them. Certain it is, as far as we know, that if any Greek besides Praxagoras who lived in the 4th century B.C., was distinguished for his knowledge of medicine in the next three centuries, he has left no monument of his greatness behind him. Indeed, beyond Alexander of Tralles and Ætius, no great medical names are to be found among the Greeks from the death of Hippocrates to the time of Paulus—nearly 1000 years!

The conquests of Alexander the Great led to the foundation of Alexandria in 331 B.C.; but the library, though established in 320, and the school somewhat later, seem to have attained the greatest renown between 285 and 146 B.C., and were, therefore, not coeval with the time of Hippocrates. Though the text-books in the school of Alexandria were the works of that great man, his method was wanting. The Egyptians were not sensible of the value of exact observation; they abstained from speculative doctrines, and they were satisfied to be compilers. Their school can boast, however, of having extended the basis of medical science by the zealous cultivation of anatomy. In this school Aristotle devoted himself first to the study of natural history, and then to anatomy; but whether his knowledge of the structure of the human body was derived from the dissection of human bodies is uncertain. But it is certain that in the school of Alexandria anatomy was diligently cultivated, and that, according to the assertion of Galen, Herophilus, and Erasistratus, who lived in the time of Ptolemy Soter, were distinguished for their knowledge of anatomy, and that Herophilus carried it to as high a point of perfection as was then possible. But here, as in Greece, these men were before their time, and the school of Alexandria produced no successors worthy of them; it gradually declined until the empire was subjugated by the Saracens in 640, and within 80 years the Caliphs prevailed over Egypt, Syria, Persia, the north of Africa, and a part of Spain.

When Rome became the mistress of the world, men who were famous in science and in art were attracted to that capital; but, up to the time of Cato the Censor, (234-149 B.C.,) medicine and the labourers in that field were held in small repute by the Romans. Indeed, until the time of Celsus, little respect was extended to them; and it is even a question whether he was not valued more for the elegance of his writings than for his knowledge of medicine. Celsus, next to Hippocrates, is the oldest author whose works have come down to our own times. But whatever reputation he may have possessed, he seems to have attracted so little attention in the age in which he lived, that neither his age, his country, nor his profession is known. With regard to his name, the manuscript in the Vatican is supposed to set that at rest: it is signed Aulus Cornelius Celsus.

From the commencement of the first century to the time when Galen flourished, about 150 years, no great discovery was made, and a heavy cloud was gathering upon medical as well as upon other sciences. There were, however, bright scintillations apparent during this time. It was the period of Aretæus and Rufus; and in the latter half of the 2nd century appeared Galen, a man as remarkable for his vast erudition as for his genius. Probably of all the medical men of antiquity none possessed a genius so brilliant or talents so rare as Galen. He lived in a time when the disputes in the schools were most bitter. He brought the Platonists back to the path marked out by Hippocrates; but his error was a desire to conciliate all parties. He attempted to fuse the doctrines of Socrates and those of Plato; and he soon found how difficult it was to establish harmony between the dogmas of Socrates, Plato, and Hippocrates. After him the decline of science became more and more perceptible, though for a time the veil was raised by Ætius, in the 6th century; and a bright light was thrown around by Paulus in the 7th; but he was the last Greek who cultivated medicine with distinction.

Medicine among the Arabs had never a vigorous existence. After the conquest of Egypt by the successors of Mahomet, Greek books on medicine were circulated among them; but their medicine was always inferior to that of the Greeks and the Romans. Their superstitions and their religion were opposed to dissection, and operations by means of cutting instruments were little practised among them; still the Arabs had their Rhazes, their Avenzoar, their Averrhoes, their Albucasis, and in certain departments of medicine they did good service.

The age of Theodosius, the 4th century, was the twilight of science, of literature, and of art in Europe; and with the 5th century those dark ages commenced which for centuries involved the human intellect in the darkest night. The barbarians then spread over

southern Europe ; Rome was taken in 409 by Alaric, King of the Visigoths ; they destroyed its monuments, and effaced the traces which remained of science and art, substituting for the then polished manners of the Romans their own barbarism, and for the language of Cicero the guttural idioms of the Goths. In the 11th century, the age of the Crusades, some rays of intellectual light became visible over Western Europe. The town population of Italy began to make head against ignorance and despotism ; republics were formed, laws were enacted and obeyed, manners were purified, the human intellect was roused into action, liberal arts were cultivated, and the light of reason began to spread around these small centres. Schools were established, and universities were founded. Late in the 14th century Lanfranc commenced his teaching at Paris ; still the 14th century did not find medicine at the height it had been left by Hippocrates.

Though an impulse was now given, and though it was a period of progress, the advance of the 15th century was but slow. Through the 16th, the onward progress was more assured, and there was a considerable advance in the knowledge of the treatment of disease. In the last half of that century its progress was more rapid than in any preceding half-century. The works of Vesalius, Eustachius, and Fallopius paved the way for the brilliant career of Paré and others ; and there can be no doubt that there were now many important advances upon the knowledge of Hippocrates. But the discovery of the circulation of the blood at the commencement of the 17th century, is the most brilliant and the most important event that has ever happened in anatomy and physiology. It threw the brightest light upon one of the principal functions of the body, and exposed the uselessness of many of the views of the ancients on the subject. Harvey publicly maintained his views on the circulation of the blood in 1616. The 17th and 18th century were periods of still more steady progress ; they exceeded any similar period by discoveries and improvements ; but to the last half of the 18th we are accustomed to look as a bright period in the history of surgery. With a correct knowledge of the circulation of the blood, unrestricted opportunities of cultivating healthy and morbid anatomy, and with a knowledge of the experience of the past, it was natural to expect that our knowledge of disease should be, during those centuries, more accurate and extensive than that which was possessed by Hippocrates ; and it was so. From the time of Harvey to the present hour, however, through many difficulties, jealousies of corporations, opposition from within rather than from without, and the absence of any fostering care on the part of the rulers of the earth, medicine has steadily advanced, and its steps have been more and more assured through the different countries of Europe. In our own country we have had Linacre, (who, if he did not advance the science, advanced the means of cultivating it ;) Wiseman, (the Paré of our land,) Sydenham, and Hunter, Pott and Cline, Baillie and Abernethy. France has had Paré, the members of the celebrated Academy of Surgery, with Petit at their head, Desault, Portal, Bichat, and Dupuytren. Italy has had Vesalius, Eustachius, Fabricius, Morgagni, and Scarpa. Germany has had Scultetus, Hildanus, Purmann, and Heister.

But, though great progress had been made since the 16th century, and though medicine in the 17th century was altogether more advanced than at any previous period of the world's history, its progress then, as well as in early times, was fitful and tide-like. For a time the advance was steady, but again its course was unsteady or retrograde. To some extent this unsteadiness was owing to war and intestine convulsions, but to a greater extent to civil influences. War and political convulsions were most influential in early times. The varying phases of modes of thinking have been influential in all times. When printing was unknown, and the copies of the greatest works might be single, the spoliation of a conqueror, or a fire such as destroyed the Alexandrian library, might extinguish science in a country for a time, but it could only produce such injury when authorities were rare and the cultivators of science few. In our own times, violence might destroy our cities or fire might burn our libraries, but science would survive the catastrophe. It is because the copies were so few, and so frequently tampered with, that we do not possess the works of the great men of antiquity in all their purity. There is probably no medical work, written by the earliest cultivators of medicine, which has come down to us unmutilated. The works of Hippocrates were probably concisely written on wax tablets or prepared skins, and for centuries they underwent constant mutilations and interpolations. The more peaceful influence of the revolutions of the human mind have, however, been the most powerful influences in inducing the changes to which we have referred. Whatever be the prevailing dogma of the time, whether philosophical or religious, its colour will be stamped on the studies of the time, there will be the same impulses, the same errors.

The dominant philosophy in the time of Hippocrates was clearly that of Socrates, who was born 470 B.C., and was, therefore, ten years senior to Hippocrates. When Hippocrates was yet a very young man, Socrates had proclaimed his "rational method," that philosophy was established and medicine followed in its train. That philosophy rejected all pure speculation : it admitted only well-established facts as the basis of science and reason. Xenophon relates a fragment of a conversation he had with him that would seem to have had its influence over Hippocrates —to have been the germ of some of his most brilliant works. Xenophon's fragment runs thus : — "Socrates strongly exhorted his friends to take great care of their health, either by consulting well-informed persons upon the best regimen to follow, or observing during the course of their lives what food and what drink, what kind of exercise, suited them best, and how they ought to employ themselves to preserve public health." Socrates, it is true, broke down under the severity of his own system. And strange it is, that this man, so superior to others, bent under the application of the principles he had established, as if the premature discovery had exhausted his genius. The same love of truth, the same search for what was useful, the same stern morality, are apparent in the master-pieces of Hippocrates. Both, however, were too much in advance of their age, and their school hardly survived them in Greece.

The philosophy of Socrates gave way to that of Plato, who regarded the senses as deceptive, more capable of confusing than enlightening the intelligence. He maintained, that if it were possible to obtain a just knowledge of the nature of things, the use of the senses must be interdicted, reason alone could be relied on—and his dialectic presided over all sciences. The disciples of Hippocrates struggled unsuccessfully against the new and dominant philosophy. For six centuries their disputes continued, when Galen appeared. He was a profound admirer of Hippocrates, but he bowed down under the car of Plato. How strange is the spectacle! Galen, the anatomist, the experimenter, the observer, and practitioner, adopting, strengthening, and giving currency to a system which put aside all positive observation. He was overpowered by the dialectics of Plato, in which he had been educated. But however clearly it is now admitted that the system of Hippocrates was superior to that of Galen, certain it is that Hippocrates lived to see his own disciples abandoning his philosophy, while Galen subjugated his followers to his authority, and held them in chains. So true is it that error, for a time, is often stronger than truth.

A third period in the history of ancient medicine is that of the Arabs. It was a time of reaction against all philosophy. They had imperfect notions of Greek medicine ; they were not observers of disease, nor were they given to theorise ; they were simply compilers, and even their compilations were inaccurate. But for a time they were the masters of the lands in which learning had flourished ; and through them, impure as was the source, many parts of Europe derived the knowledge they possessed, before the revival of letters.

They were succeeded by a period when great influence was exercised over all departments of art and science—the period of revival and reformation in the Church—the time of Luther. It was also a period of revival in medicine. It is not that medicine suddenly advanced beyond the position that it had attained in Greece ; but it was a time when a more exact knowledge was obtained of the state of medicine in the best time in Greece. The religious houses which had become the depositories of works of value, of Greek and Roman science, unmutilated by the Arabs, were ransacked, printing was invented (1438), and the copies of the master pieces of antiquity were multiplied. In the 16th century Paré appeared, and Hippocratism was restored to much of its pristine purity. He adopted Hippocratism, and he extended it ; but, spite of the efforts of Fabricius in Italy, Scultetus in Germany, and Wiseman in England, the Hippocratic school of the 16th century scarcely outlived that age.

A period now arrived which exercised a more abiding influence upon medicine as well as upon other sciences—a period when the influence of Bacon was established. But his plans were too severe for the time, and most minds were content to adopt the less severe plans of Descartes, whose fame was soon afterwards established, and led to a further departure from the right path. His method was false in this, that, like that of Plato, it substituted mental conceptions for pure observations. In fact Bacon and Descartes were almost a return of Socrates and Plato. Although the philosophy of Descartes was extensively adopted, there was at that time in France a surgeon who refused to bear his yoke. It was Petit; he saw the error and had strength to resist it. Like Hunter he was ill-educated; his first instructions were gathered in a barber's shop. The association of barbers and surgeons was even then not dissolved. He set before himself two words—experience and reason—and they were his guiding stars—nearly realising the philosophy of Bacon. The character of his surgery was Hippocratic, he abjured speculation. He observed carefully and recorded faithfully. This is the true secret of progress. In England, Sydenham did not remove himself far from the method of Bacon; Pott adhered more closely to it; but the great illustrator of the Baconian philosophy was a young man, at that time scarcely 23, who appeared at St. Bartholomew's Hospital in 1751; he was then perfectly unlearned, but even at that time he was renowned for his dissections. He came to listen to Pott's instruction—it was John Hunter. He no doubt learned from Pott's lips that experience should be the foundation of surgery. This he adopted as his rule of action—it was his philosophy—he felt that it was enough, and he did not seek to learn more. When his brother William urged him to improve his literary qualifications, he swore that Greek and Latin were only fit for old women. No doubt he felt all his after life the want of preliminary education,—it might have given more precision to his thoughts. Still it is to Hunter that we owe those general principles which govern the course of animal bodies in health and disease. It was Hunter who made the medical man—to use the Baconian expression—the minister and interpreter of nature. It was Hunter who made known to us the mechanism of the processes of cure in many diseases, and how we may direct them. His great views have now happily a ruling influence over medicine in the Old world and the New, and they are acted upon by many who are ignorant of their source. If we were to erase from our tablets what we owe to Hunter, what a wide chasm would be left! His followers were many of them able expositors of his views, which are now, for the most part, accepted as truths of science. Jenner and Home, Abernethy and Cooper, were worthy illustrators of his views in England. It has been said, that in the middle ages the practice of medicine was scarcely better than a handicraft. Paré and Petit elevated it to something like an art, but Hunter made it a science.

By means of the slight sketch now drawn, I have given a general view of the state of medicine in times which have preceded our own, and of the influences which have interfered with it; and it may now be asked, what progress has it made in the twenty-two centuries which have elapsed since the days of Hippocrates? If the progress is to be estimated by the medical literature current at the several epochs of our history, the difficulty is even then great; but if it is to be tested by the ultimate object of all medicine, namely, the mitigation of human suffering and the extension of human life, the means of applying such a test are utterly wanting. Indeed, if we apply, as we must do, the method of Plato rather than that of Socrates in the determination of the question, our path is still beset with difficulty. If we start from the time of Hippocrates, our steps are arrested at the threshold. Do we know all the works of Hippocrates? are they genuine or mutilated? These questions cannot be conclusively answered. Failing that, we must take the works attributed to Hippocrates as our starting point. Mutilated or unmutilated, they are the only means we possess of estimating the amount of medical knowledge current in Greece in his time. And when we contemplate those works, we cannot refuse to admit that the state of medicine in Greece, some centuries before the Christian era, was in all respects, except in the knowledge of anatomy, in a more satisfactory state than it presented in Western Europe a thousand years later. Even in surgery, although the want of anatomy must have been severely felt, there was no shrinking from the performance of the most serious operations. The operations of the trepan—of tapping the chest, of lithotomy, those for hernia and for aneurism, were performed during or soon after the time of Hippocrates. Gastrotomy was performed by Praxagoras, lithotomy by Ammonius, who cut Antiochus the Sixth, King of Syria, 143 B.C.; Bronchotomy, by Asclepiades, the Bithynian, in the time of Cicero; couching for cataract, before the time of Celsus; extraction, in the first century, by Antyllus.

To estimate the progress of medicine in Greece by that ultimate test, a lessened mortality or an extended life, we have seen is impossible, because the materials are utterly wanting. And this is equally the case in Western Europe up to comparatively modern times. In Sweden, France, and England alone is evidence to be obtained of the general mortality as early as the 17th century. In our own country we have the materials for estimating the comparative mortality for upwards of two centuries. In 1600 the mortality in this metropolis amounted to 1 in 25 of the population; at present, it is only 1 in 41. In England and Wales, in 1700, the mortality amounted to 1 in 39; in 1846, it was 1 in 48. I am not, however, prepared to maintain that this lessened mortality is owing solely to improved methods of treating sickness; but I affirm unhesitatingly that it is partly owing to improved treatment of disease, and partly owing to improved sanitary conditions, which have been suggested for the most part, if not wholly, by medical men; and therefore, I say, medicine, in so far as a lessened mortality is a proof of it, has made progress during that period almost with a giant's step. But there are points in support of this view which can be maintained with even more confidence, for the influence of medicine is more direct, more apparent. In 1800, the population within the metropolitan district was estimated at 900,000; the deaths from small-pox were 2,409; and in something like this proportion the disease prevailed over England and Wales, destroying the population by thousands annually. In 1830, the metropolitan population was nearly doubled, but the deaths from small-pox were only 627. In 1846, with a population more than double that of 1800, the deaths from small-pox were 257. Who stayed or mitigated this plague, which was no respecter of persons, but seized upon its victims indifferently, not only in the cottages of the poor, but in the palaces of the rich? A medical man—Jenner. What was his reward? A peerage—a pension? No; only an inconsiderable parliamentary grant. To whose suggestions do we owe our present immunity from scurvy, once the plague of our gaols, our ships, our armies? No one can deny, that it is to those of medical men. The same may be said of the lessened ravages of fever and many other pestilences which stalked through our land at the noonday.

It will not, I apprehend, be denied, that in lessening the mortality of the country—in mitigating or almost extinguishing the virulence of plagues—medical men have rendered the most valuable services to this country. It is the boast, or at least the practice, of every country, either savage or civilized, that when great services are rendered to the common weal by her sons, commensurate rewards are conferred in satisfaction of them. In savage life, the successful warrior is raised above his fellows, the "medicine man" is held in honour. In civilized countries distinctions are conferred on the clergy, the soldier, the sailor, the lawyer, who have deserved well, with no niggard hand. A clergyman may take rank next to the Royal family, and possess a princely income;—a soldier may attain to the highest rank in the peerage, and enjoy a liberal pension, which may be extended beyond his own life;—a sailor may acquire a peerage and a pension;—the lawyer may become Lord Chancellor, with a large present income and a pension in reversion;—but a medical man cannot proceed beyond the baronetage, and that is conferred, not on men who have spent nights and days in the endeavour to extinguish some great social evil, but upon the successful private practitioner. And he cannot obtain a pension. And besides Jenner, (who stayed a plague, and got a paltry parliamentary grant,) upon what other medical man has the state conferred any pecuniary recompense for services rendered to the country. Until the present year, medical men in the navy, who had grown grey in their country's service, were denied those trifling honours which are often lavishly bestowed for small military services. Is it that the service of the medical man, as compared with that of the clergyman, the soldier, the sailor, and the lawyer, is too trifling to entitle him to these distinctions? How stands the case? The soldier,

it may be, fights a battle on the plains of Hindostan; he may have laid thousands dead upon the field, still he has earned a pension and a peerage. But what comfort has be brought to the homes of our people, compared with the bloodless conquest of the medical man over disease? Does the prosperous lawyer do much to bring comfort to our homes? He may plead successfully the cause of one rich man to the discomfiture of another, but what does he do to relieve the wide-spread misery of the poor? Still he has practised successfully for his own advantage, and a place, a peerage, and a pension, may be his reward. It is not that the lawyer may be better educated, or better able to maintain the honour, for the medical man may be a first-class man or a wrangler of his year; may have toiled a life long in his country's service; may, like Jenner, have stayed a plague; his reputation may be world wide; he may have acquired wealth enough to maintain a high station,—but no coronet has ever graced his brow. I know it is said that the State requires the services of the ennobled lawyer; that may be true, and I do not grudge him his honours, but that is no reason why honours should be withheld from the medical man. Does the House of Lords require the presence of the soldier or the sailor? There is, however, no reason to think that the case has ever been widely different. True it may be that Hippocrates was crowned by the Athenians, and that Charles the Ninth may have thrown his mantle over Paré, on the night of the fearful massacre of St. Bartholomew. But what honours were conferred on Galen, on Harvey, on Sydenham, on Hunter? It happens, too, that the medical men who have devoted themselves to their country's service are not commonly successful candidates for fees, and their reward is only to be met with in their own bosoms. If the honours of the peerage, or the comforts of a well-earned pension, be withheld from the medical man, it might be that he found his reward in some place of trust or profit. How stands this case? It is notorious, that great but remedial sanitary evils prevail over the country, tending to swell the registers of deaths. The evidence of the existence of such evils, and the mode of remedying them, have been pointed out by medical men. The existence of the evils complained of has been acknowledged by society; the necessity of lessening them has been forced upon the Government. Legislative enactments have been made on the subject; a board has been created with powers to carry remedies into effect, but no medical man finds a place upon that board. A single individual urged upon the public from year to year the evils of intramural interments. For years his voice was almost unheeded, still he persevered, and ultimately the justice of his views and the necessity of putting an end to intramural interments are generally acknowledged. Powers are obtained from Parliament to form a board to grapple with this evil, but no place upon it is found for the man who raised the cry and urged it upon society, until a remedy was enacted. The catalogue might easily be enlarged, but it is unnecessary for our purpose. With respect to private practice, the attendance of the medical man is almost a case of bargain and sale—there is an understood value, and the price is paid. In some instances it may be enough to furnish a liberal income; but a large number are not in a condition to earn more than very narrow means of subsistence. I do not refer to these instances, however, so much as to the unpaid and very scantily-acknowledged services he renders to society, and for which the governments of countries should provide. These things cannot fail of rankling in the medical man's mind; still he pursues his benevolent course undismayed; for, though society does not recognise the good he does, his own conscience does.

Such is the medical man's lot. His class commands only small honours from society; his greatest services are unrewarded or unacknowledged. Still, his is a calling, the practice of which may bring many sorrows but also many joys; and it is our business, if we embark in it, without looking to the right or to the left, to fit ourselves to practise it with satisfaction.

This school is now virtually about to commence its first winter session—for it was met by difficulties in the last which arrested its progress. It is now fully and, I believe, efficiently organised; and not only are the lecturers prepared to devote all their energies to the furtherance of the business of elementary instruction, but the hospital staff are equally determined to afford every facility to the students for acquiring that practical knowledge which is necessary to fit them for the practice of their profession, by making available the rich stores of this fine establishment. In the difficulties which stand in the way of any considerable enlargement of the school buildings, the student will have the best guarantee that the instruction in the school can be effectually given, that demonstrations will not be obscured by the distance between the pupil and his teacher, and that in the wards of the hospital he can observe disease without being annoyed with inconvenient crowding. But I cannot deny that the authorities of this hospital are open to reproach, for having so long delayed, and even resisted, this good work, without which the duties undertaken at its establishment were only half performed. The first claim upon an hospital is to heal the sick; but the second—and it is not much less strong—is to afford instruction to those who are fitting themselves to heal the sick over the length and breadth of our land. It has until now neglected a duty which has been discharged by every other metropolitan and many of the provincial hospitals,—a duty which, in most cases, their own interest has impelled them to discharge: for, if there be no school, there will be few or no pupils; if there be no pupils, the service of the sick will be ill-discharged; and the services of the ablest men as medical officers will not be obtained; because, however a man may be devoted to his profession, he looks upon the service of an hospital as a means of success in life, and a plain way to success is to have a large number of admiring disciples spread over the land. I believe this tardy recognition of its duty was delayed long enough to peril the character of this hospital. It was a violence done to the memory of many eminent men who have been attached to the establishment. It was an injury to the hospital itself,—for it had strong claims to be maintained in the van of such institutions. Of it, it can be said, that it was the first unendowed hospital to rear its head in this land. Its worthy founders recognised the want of a home for the sick in this district, and threw themselves upon the philanthropy of her people for its support. They judged wisely, and the appeal was nobly answered. Their undertaking not only secured invaluable benefits for this district, but it has carried comfort through every part of the land, because their example was quickly followed by the principal provincial towns, and there is now hardly a county in England and Wales which has not an hospital, supported by voluntary contributions. There was a sacred duty imposed upon the governors, then, to maintain this institution in the place to which it was entitled among the hospitals of England—to do something beyond the erection of this beautiful building for the service of the sick, and that duty has been now tardily discharged. For a long time it was maintained that the school was unnecessary, and that students would resort to its wards without that inducement. That was true when St. Bartholomew's, and Guy's, and St. Thomas's, were the only hospital-schools in London, when a large number of students were educated in private schools, and for practice resorted to the hospitals which were most conveniently situated for the purpose. Then the wards of this hospital were peopled from the school of the Hunters and Baillie, in Windmill-street, and at a later time from King's College and Dean-street; but the scene is now changed; only two private schools remain; they are not within convenient reach of this place. At the last hour, the governors of this hospital became sensible of the truth of what had many times been represented to them; they then felt that they had no right to trifle with the reputation of the hospital. The school has been established, and we may now say, God-speed. I trust we shall soon find the class-rooms of the school, and the wards of this fine hospital animated with a class of students, who shall go forth from this place to be a blessing to the people among whom their lot may be cast.

IMPORTANT DECISION. — WESTMINSTER COUNTY COURT, Oct. 15, 1850.—LAKE *v.* BREAREY.—This was an action brought by Mr. Lake to recover the sum of 1*l.* 1s., retained by Mr. Brearey for a second year's subscription to the Medical Protection Office. Mr. Lake became a subscriber on July 2, 1849, and on the same day in this year forwarded a notice which was not received until July 3, directing Mr. Brearey to erase his name from the list of subscribers. Mr. Brearey claimed the right of retaining, on a settlement of accounts, a guinea for a second year's subscription. His Honour decided that the case was within the fourth section of the Statute of Frauds, and that the contract, when Mr. Lake became a subscriber, being a contract for more than a year and not being in writing, was void.—Judgment for plaintiff.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

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[Continued from page 302.]

ELEVENTH PAPER.

SYMPTOMS OF PERFORATION OF THE INTESTINE WITHOUT THE EXISTENCE OF THAT LESION.

The two cases detailed in this paper possess great interest, from the identity of the symptoms they presented with those laid down by the highest authority on the subject—Louis—as diagnostic of perforation of the intestine. With reference also to the second of the two cases here recorded this additional may be observed—that, as the girl had been exposed to the contagion of typhus fever, had no examination of the body been made, she might have been supposed to exhibit an exception to the law, that the contagion of typhus fever never produces typhoid fever. (a)

Case 34.—In a female, aged 20.—Rigors—headache—diarrhœa—tenderness of abdomen—retching—loss of appetite—slightly furred tongue—greatly enlarged spleen—rose spots—convalescence between the 30th and 34th days—relapse on the 44th day; *i. e.*, rapid pulse—diarrhœa—rose spots—tumour in right iliac fossa—second convalescence by 57th day. On 75th day, sudden pain in abdomen—collapse—vomiting—rigors—general tenderness of abdomen—constipation—commencing convalescence and erysipelas of face on 80th day—convulsions and *death* on 86th day. *Twenty and a-half hours after death.*—Fatty degeneration of mesenteric glands—recent adhesions of peritoneum—enlarged spleen—cicatrizing ulcers on Peyer's patches.

Emma F., aged 20, a domestic servant, was admitted into the London Fever Hospital August 20th, 1848. Her illness began Sunday, August 13th. The symptoms present before her admission were rigors and chilliness, alternating with sense of heat, headache, pain in the limbs, and loss of appetite. She vomited on the Thursday, after taking a dose of medicine. The bowels, confined at the outset of the illness, had been, before she came under observation, much relaxed. No cause could be assigned for her present illness.

From the date of her admission into the hospital till I saw her, the following symptoms were present:—Disturbed sleep; trifling headache; muscular tremors; moist and nearly clean tongue; little appetite; diarrhœa; fulness, resonance, and slight tenderness of the abdomen; severe retching for a few hours on the evening of Sept. 2nd.

Sept. 4, 24th day of disease.—Is reported by the nurse to have slept at intervals through the night, talking occasionally in her sleep; some deafness; face flushes occasionally; tongue moist, and slightly furred, not abnormally red; no appetite; has passed, the last twenty-four hours, five pale, frothy, curdy-looking stools; abdomen full and resonant; a tumour can be felt in the abdomen, the anterior margin of which is two fingers' breadth to the left of the umbilicus, its lower edge a little below the level of the umbilicus; posteriorly, it is lost in the left lumbar region,—superiorly, it extends into the left hypochondriac region under the false ribs; its anterior margin is acute and hard, (this tumour was doubtless the enlarged spleen;) liver dulness about two fingers' breadth below the cartilages of ribs on right side; no tenderness of abdomen; no trace of the rose spots previously noted, but several fresh rose spots have appeared since the last report. Pulse 90, weak.

On the 26th, four or five, and on the 27th day two, fresh rose spots were observed.

By the 34th day she appeared convalescent; her pulse was only 84. She had passed only two stools, her tongue was moist and clean, and the appetite was returning; the splenic dulness was much less extensive, and she seemed stronger. No fresh spots had appeared since the 27th day. She was, in fact, convalescent, the only symptom of illness being a little hysterical laughing, crying, and sense of choking, on first waking in the morning.

On the 37th day, I noted that there had been no return of the hysterical symptoms; her appetite was good; the tongue continued clean; the splenic dulness was still less extensive than on the 34th day; no fresh spots had appeared, and she had gained some strength; she had passed, the preceding twenty-four hours, two relaxed stools. She was marked to be convalescent.

On the 44th day, the nurse reported that Emma F. had, the day before, refused her food, and, in the evening, had an attack of rigors. At the time of my visit on the 44th day, I noted as follows:—

"Pulse 120, weak; slept tolerably well last night; some frontal headache; no delirium; spirits depressed; expression rather anxious; tongue moist, covered with thin white fur; she passed three stools yesterday, none to-day; very little appetite; has retched frequently, but ejected nothing; no fulness nor tenderness of the abdomen; splenic dulness five inches by three and a-half inches, (*i.e.*, although large, the spleen was much smaller than on admission.) In the right iliac fossa is a round firm tumour, about the size of a large walnut, only perceptible on deep manipulation—it is not tender. Skin cool, rough, and dry; no spots.

Between the 45th and 51st day, she slept but little; her mind occasionally wandered; while asleep she often sweated freely. She complained frequently of attacks of sharp shooting pains, lasting for three or four minutes at a time; in the intervals she was quite easy; the pain did not precede the stools. During the seven days in question, several fresh spots, at intervals of a day or two, made their appearance; thus, one was noted on the 46th, one on the 47th, two on the 50th, and several on the 51st day. The splenic dulness, during the same period, again increased in extent. On the 51st day, the small tumour deep in the right iliac fossa was less defined than it had previously been. On the 61st day, it could not be distinctly detected. By the 67th day, the tongue had again cleaned; the appetite was good; the bowels regular, *i.e.*, two solid stools were passed in twenty-four hours; the general powers were improving. She continued in this state—stools solid and appetite good—till the 75th day; when, having suffered from trifling griping pain in the abdomen for two or three hours, she was seized suddenly a quarter past two p.m., *i. e.*, about two hours after she had eaten her dinner, with severe pain in the abdomen; vomited what she had eaten at dinner; then left her bed and passed one copious, pale, nearly solid stool; she experienced no relief from the action of the bowels; on the contrary, the pain was increased in severity, so that she nearly fainted; her hands and feet became cold, and covered with clammy sweat. Being in the hospital at the time, I saw her about ten minutes from the commencement of the pain; the countenance then expressed anxiety, the surface was cool, the hands and feet cold and damp, the pain in the belly had in a great measure subsided; there was no marked fulness, but some slight tenderness of the abdomen. She described the acute pain she had experienced to have been seated chiefly about the umbilicus. Her pulse was extremely rapid and weak. I prescribed tinct. opii mxl., aq. ʒj., st. s., and gave strict orders that she should not be moved in the slightest degree; that *nothing* besides the medicine should be administered.

Twenty minutes to 5 p.m.—Has vomited three times since my last visit; ejecting, apparently, only half digested food, no stool, no urine. At the present moment she is lying on her back, shoulders raised by pillows, legs drawn up to abdomen. Expression anxious, worn; tongue moist and nearly clean; abdomen slightly but distinctly tender, not very full; says that she is easier when her knees are drawn up towards her belly; pulse 88, extremely small and weak; surface of trunk warm, hands cold and damp, a little colour on the cheeks.

Pulv. opii, gr. i. 4ta. qq. hora sumend: Fomcnt: calid. abd.

Urine to be removed if necessary by catheter. On no consideration is she to be removed from her bed, (the necessity of absolute repose was impressed on the patient as well as on the nurse.)

10 p.m.—Has had frequent rigors; tenderness of abdomen

(a) See "Medico-Chirurgical Transactions," Vol. XXXIII., on the Identity or Non-identity of the Cause of Typhus from Typhoid Fever and Relapsing Fever. By W. Jenner, M.D.

increased; is lying on right side, legs drawn up towards abdomen; in other respects as last report; pupils large, no drowsiness. About a pint of dark coloured urine of strong odour just removed by catheter. Pulv. opii gr. ij., st. s. Pulv. opii gr. j., 4ta. qq. hora s.

On the following morning, *i.e.*, the 76th day, I noted:—

Passed a restless night, dozed a little towards morning; her mind is in all respects natural; says that she is sometimes quite free from pain in the abdomen, but that every now and then the pain is very severe; abdomen full, resonant, and *very tender over its whole extent*; no stool, no urine; tongue moist, white, more thickly furred that at last report; feels constant nausea, and has vomited frequently, in all about 1½ pint of green transparent mucous-looking matter has been ejected from the stomach; she often retches without throwing up anything. Hands cold, trunk warm, face of good colour, countenance indicative of anxiety and depression. Frequent rigors, *no sense of chilliness*; on the contrary, she complains of feeling hot. Pulv. opii, gr. ij. statim sumend. Pulv. opii, gr. j., 4ta. qq. hora s.

On the next, *i. e.*, the 77th day, she was evidently slightly under the influence of the opium. My notes state:—She dozed at intervals during the night and a little this morning; the pupils are small; expression much improved, anxiety almost gone; skin of trunk and extremities warm; no stool; abdomen full, resonant, and *very tender over its whole extent*; no pain in the belly except on pressure; position dorsal, legs drawn up; no return of rigors; no retching since last evening; pulse 120. Pulv. opii, gr. i. 6ta qq. hora s.

On the 78th day she was decidedly better; her abdomen was still full and resonant, but the tenderness was much less—trifling in fact, with the exception of the right iliac fossa. She lay on her back, but the knees were drawn up much less closely to the abdomen than they had previously been. No stool had been passed.

On the 79th day, the pulse was only 100 at the same time it was fuller than before; the knees were still elevated, but there was scarcely any tenderness of the abdomen.

On the 80th day erysipelas of the face made its appearance, at first limited to the right side.

On the 81st day she complained of difficulty in deglutition, and the tonsils were red and swollen; there was considerable discharge from the nose. From this date till her death on the 86th day, the erysipelas made progress; she became violently delirious; the difficulty of swallowing increased.

On the 85th day the erysipelatous inflammation of the pharynx had extended to the larynx; she spoke in a hoarse whisper, and inspiration was shrill and prolonged.

On the 86th day, about noon, she was seized with convulsions; the arms and legs being rigidly extended, the hands clenched; she frothed at the mouth; the breathing was stertorous, rapid, and occasionally convulsive; the pulse imperceptible. She died at half-past five p.m. Convulsive catchings of the arms and frothing at the mouth continued till death.

The body of Emma F. was *examined twenty and a half hours after death.*

The peritoneal surface of the small intestines was finely injected; the lower three feet of the ileum were of a slate-grey hue, the colour increasing in depth as the ileo-cœcal valve was approached. There was an adhesion of the peritoneal surface of the jejunum, about eighteen inches from the duodenum, to the peritoneum lining the right iliac fossa. Another fold of the jejunum, about two and a half feet from the duodenum, was also adherent to the same portion of the parietal peritoneum. The extent of peritoneum covered by the false membrane constituting the adhesions referred to was about three quarters of an inch; the two adhesions were about the same size; they were readily broken down, and were evidently of recent formation; the colour of the peritoneum around the base of the adhesion was dull red, *shading off into deep grey.*

One of the lower folds of the ileum adhered to the under surface of the meso-cœcum just adjacent to the ileo-cœcal valve. On breaking down this adhesion a soft yellow pulpy mass was exposed(a), extending from beneath the cœcum between the folds of the mesentery. The long diameter of this pulpy mass was about two inches, the short diameter three quarters of an inch. The peritoneum over it was wanting for a space the size of a sixpence; the adherent fold of ileum had blocked up the aperture.

The mucous membrane of the *jejunum* was vivid red from minute injection; its consistence and thickness were normal. The adhesion at the lower part of the ileum was situated immediately adjacent to one of Peyer's patches, on which there was no trace of ulceration. The next patch, descending towards the ileo-cœcal valve, was of a deep grey colour. About eighteen inches above the ileo-cœcal valve was one of Peyer's patches, of a deep grey colour; near its centre was a smooth depressed spot, evidently a healed ulcer; there was no puckering of the tissue around. Every agminated gland from this spot to the ileo-cœcal valve was of a more or less deep grey colour. On each of the three patches immediately above the valve was an ulcer of considerable size, irregular in outline, its floor formed for the most part of submucous tissue; but at places the transverse muscular fibres were distinctly visible; the edges of the ulcers were here and there slightly elevated; at other places they were bevelled off, passing insensibly on to the floor.

The omentum was considerably injected; a little tolerably recent lymph covered the convex surface of the liver; the spleen was somewhat enlarged; the peritoneal covering of the uterus and bladder was minutely injected. There was scarcely any fluid in the peritoneal cavity.

The mesenteric glands were enlarged, flabby, and of a deep grey colour. In the mesentery corresponding to the lower part of the ileum were two of the glands, of a purple colour externally, which, internally consisted principally of a soft yellow pulpy matter, identical, in all particulars, with that found between the folds of the meso-cœcum, in the immediate vicinity of the ileo-cœcal valve.

The friends of this young woman resisted all the efforts made to induce them to permit a further examination of the body. In fact, it was only by stratagem that the above imperfect section was performed.

On her admission into the hospital, Emma F. was evidently labouring under an attack of typhoid fever. Convalescent on the 34th day; her health improved during the ten subsequent days; she then had a true relapse—*a second attack of typhoid fever*. In about a fortnight she was again convalescent. Symptoms of perforation of the intestine occurred on the 75th day; convalescence from the attack of peritonitis, and the commencement of erysipelas on the 80th day.

This case, then, may be divided into four stages:—

1st. That of the primary attack of typhoid fever.
2nd. That of the relapse.
3rd. That of sudden acute peritonitis.
4th. That of erysipelas.

1st. The *primary attack* of typhoid fever.—In this, the most peculiar feature was the *very* large volume of the spleen. It was interesting to trace, by palpation and percussion, its gradual diminution in size as the woman advanced in convalescence. Fresh spots ceased to appear after the 27th day of disease. Hysterical symptoms are not unfrequently observed in females during the early stage of convalescence, *i.e.*, while the patient is suffering from extreme general debility.

2nd. *The Relapse.*—If a patient, during convalescence from fever, suffers (suppose in consequence of error of diet) from hot skin and quick pulse, that patient is often said to be suffering from a relapse; but Emma F. had, on the 44th day of disease, *i. e.*, ten days after convalescence, a return of typhoid fever. Not only was the pulse as frequent as during the primary attack, and the skin as hot, but the diarrhœa returned, *repeated scanty crops of rose spots reappeared, and the spleen again enlarged*, though it did not attain the size it reached during the primary attack. The small tumour felt deep in the right iliac fossa was evidently an enlarged mesenteric gland. Its size, the duration of the illness, and the general symptoms, rendered it probable that the gland was undergoing a process of pseudo-suppuration. The diminution in its size was probably the consequence of absorption of the more fluid portion of its substance, and also of the subsidence of vascular engorgement.

3rd. *Sudden Symptoms of Peritonitis.*—The sudden severe pain in the abdomen, accompanied by vomiting and symptoms of collapse, rendered it highly probable, from the moment I saw Emma F., at 2¼ p.m. on the 75th day, that perforation of the ileum had taken place. This opinion was rendered still more probable, when returning to the ward, in less than three hours, I found that, although the patient had scarcely rallied from the collapse,—for her hands were

(a) Microscopical examination proved this mass to be composed chiefly of free fat globules.

yet cold, — all the symptoms of incipient peritonitis had supervened; and when, at 10 p.m., I found that rigors had occurred, and had been repeated several times, that the expression continued anxious, and that the symptoms of peritonitis were more marked than they had been at the time of my previous visit. I own I entertained no doubt as to the nature of the case. (a) I acted in accordance with the opinion I had formed, and treated Emma F. with full doses of opium, after the manner recommended by Dr. Stokes. The tenderness of the abdomen was general, not limited to any one part, so that it was evident the peritonitis was not localised. The tolerance of the opium showed the effect the peritonitis was exercising on the nervous system. On the third day from the outset of the peritonitis the abdomen was full, resonant, and very tender, but on the following day the tenderness had subsided, so far as concerned the abdomen generally, but was still marked in the right iliac fossa, pointing evidently to the spot where the lesion had occurred, on which the peritonitis depended. I was anticipating a successful termination of the case, when—

4th. *The erysipelas*, which terminated the life of the patient commenced. In this case the erysipelatous inflammation probably extended by continuity of surface, from the face to the pharynx, and then to the mucous membrane of the larynx. The erysipelatous inflammation of the pharynx often commences independent of the face, *i. e.*, does not become involved by continuity of surface. I have elsewhere shown that the larynx is generally affected secondarily to the pharynx, *i. e.*, chronologically considered.

The examination after death showed that I had committed an error in supposing the sudden supervention of the peritonitis to have been due to perforation of the intestine; it was evidently the consequence of the destruction of the peritoneum over a mesenteric gland in a state of pseudo-suppuration; the substance primarily deposited in the glands had probably first softened, and then undergone fatty degeneration by a direct metamorphosis of its protein elements. The presence of the lymph on the convex surface of the liver, and the condition of the peritoneum covering the uterus and bladder, proved that the peritonitis had been, as was supposed during life, general; while the situation of the lesion on which the peritonitis depended, and the evidence of the greater intensity of the inflammation in that spot, sufficiently accounted for the continuance of the tenderness in the right iliac fossa after the abdomen generally was almost indolent. I need scarcely point to the grey colour of the mucous and serous membranes as indicating the chronicity of the inflammatory action.

Had this patient eventually recovered I certainly should have considered the case to have been one of peritonitis, the consequence of perforation of the intestine, cured by the free use of opium. The lesion really present was evidently far less likely to prove fatal than that I had diagnosed during life. The opium was doubtless highly beneficial, and to that, and the absolute repose enforced, perhaps it was that the patient did not die of peritonitis. This case is particularly interesting as teaching the danger that surrounds the attempt to judge of the value of remedies while our means of diagnosis are imperfect.

Case 35.—In a girl aged sixteen years, the fifth day after the termination of typhus fever—sudden intense pain in the abdomen—collapse—rigors—vomiting—extreme tenderness of abdomen—diarrhœa—death. *After death*—abnormal vascularity of peritoneum—recently effused lymph on the surface of the peritoneum—enlarged spleen—abnormal development of the solitary glands of small and large intestines.

Emma Temple, aged 16, was admitted under the care of Dr. Southwood Smith, into the London Fever Hospital at the latter end of February, 1849. Her mother, aunt, brothers, and cousins, were admitted about the same time,—all were suffering from *typhus* fever. Emma was considered to be labouring under the same disease—her bowels were relaxed while she was under treatment in the hospital—she was considered convalescent on the 7th of March—I did not see her till the 12th. At the time I saw her she had just been led from the dinner-table to her bed—she had suffered a little pain in the abdomen all the morning, but, while taking her dinner, the pain became suddenly more severe, and, in consequence, as I happened to be in the ward, the nurse requested me to see the patient. She was then lying on her back—skin cold and damp—her whole appearance indicating extreme collapse—she was quite sensible, and complained of pain in the belly. The abdomen was retracted, hard, and very tender—rigors, frequent vomiting of green fluid, and diarrhœa, followed—she passed twelve stools during the night. On the following day her pulse was scarcely to be felt—the surface was cold, and she lay on her back—her whole appearance denoting extreme prostration. She died March the 14th.

The body of Emma Temple was examined March 16th. There was no marked emaciation—the abdominal parietes were retracted, or they had fallen in—the peritoneum lining the anterior wall of the abdomen was more injected than natural—the small intestines were concealed by the great omentum—the minute vessels of which were abnormally loaded with blood, especially at its inferior or free margin—the anterior-peritoneal surface of the transverse arch of the colon was somewhat more vascular than natural—not so the peritoneal surface of the stomach. On turning up the omentum its posterior surface was found much more minutely injected than its anterior layer. The peritoneum covering the posterior surface of the transverse arch of the colon was vivid red from minute injection.

In the pelvic cavity were about eight ounces of turbid yellow serosity—the turbidity being, in a great measure, caused by minute particles of purulent-looking matter diffused through the fluid; on standing, the serosity let the larger of the particles fall to the bottom of the glass, where they formed a copious sediment.

Several folds of the small intestines lay in the pelvic cavity. The peritoneal surface of these folds was of a bright scarlet colour, the redness was punctiform or uniform; the latter appearance being caused, apparently, by the juxtaposition of puncta.

The folds of the small intestines situate below the umbilicus were evidently much more minutely injected, and much redder than those placed above the umbilicus. The whole of the peritoneum covering the small intestines and the posterior wall of the abdomen, was covered by a thin layer of soft yellowish lymph. The quantity of the lymph was greatest at the angle formed by the separation of two adjacent folds of intestines.(a) There was *no enlargement of the mesenteric glands.*

The *small intestines* contained some dark green fluid, and shreds of dark green mucous adhered to the lining membrane; the latter membrane itself was pale,—perhaps somewhat thicker than ordinary; its consistence was normal. Peyer's patches were perfectly healthy in colour, thickness, and consistence. The solitary glands throughout the whole of the *ileum* and the lower part of the *jejunum* were enlarged, dull white, and hard; they felt like little seeds scattered over the lining membrane of the gut. In no instance did they equal small pin-heads in size.

The *cæcum* was healthy in all particulars.

The *solitary glands* of the *colon* were abnormally distinct; from twenty to thirty could be counted on a square inch; they varied in size from a mere point to half a large pin-head. The mucous membrane was pale, and of normal consistence throughout.

The *gall bladder* was distended with dark green bile.

The *liver*, *kidneys*, *pancreas*, *larynx*, *pharynx*, *stomach*, and *brain* and its membranes, presented no appreciable deviation from their normal state.

The *spleen* weighed 7¼ oz.; *i. e.*, it was heavier than natural; its size corresponded to its weight.

A small white patch on the anterior surface of the right ventricle was the only deviation from health in *heart* or *pericardium*.

Old adhesions united the right pulmonary and costal pleuræ. Both *lungs* were perfectly healthy in appearance; there was no puckering of their apices, and not the slightest trace of tubercle in either.

(a) "If, in the course of a case of typhoid fever, whether severe or trifling, or even in unexpected circumstances, the disease having been up to that moment latent, there should supervene suddenly in a patient labouring under diarrhœa, pain in the abdomen, greatly increased by pressure, accompanied by alteration in the features, and more or less quickly by nausea and vomiting, perforation of the small intestine should be diagnosed. The sudden appearance of violent pain in the abdomen, accompanied by change of expression, would be insufficient to make the same diagnosis with absolute certainty; the pain must be increased by pressure. * * * Not only is this increase in the pain (by pressure) necessary, but it is also necessary for the diagnosis to be made with certainty that the pain should extend with more or less rapidity to the whole abdomen."—Louis' Recherches sur la Maladie connue sous les Noms de Fievre Typhoide, &c. 2nd Edit. Vol. I., pp. 326 and 32

(a) Redness of the peritoneum limited to these parts is *absolutely* diagnostic of the pre-existence of inflammation of that membrane.

The *bronchial glands* were normal in all particulars.

The relatives of Emma Temple, admitted into the hospital, had well-marked *typhus* fever with *mulberry rash*. Her mother died, and after death her intestines were found in all respects healthy; there was no enlargement of the mesenteric glands, and no disease of Peyer's patches.

When called to see Emma T., it was evident that she was labouring under an attack of peritonitis, and that it had supervened during convalescence from an acute illness accompanied by relaxed bowels; sudden severe pain, compelling the patient to leave the table, and to beg assistance to enable her to reach her bed, accompanied, or immediately succeeded, by symptoms of collapse, and these again quickly followed by oft-repeated rigors, extreme tenderness of the *whole* abdomen, and frequent vomiting of green fluid, constitute that group of symptoms which are said by Louis to be diagnostic of perforation of the intestine. See previous note (a). An examination after death of Emma Temple, proved that the peritonitis was independent of any traumatic cause. It was an example of that rare affection, acute idiopathic peritonitis. My impression is, that I have seen at least one other such case, *i. e.*, a sudden attack of acute peritonitis with extreme collapse, during convalescence from typhus fever, in which, of course, no ulceration of the intestine had occurred. At the present moment I cannot put my hand on the records of the case or cases to which I here refer. The condition of the solitary glands of the small and large intestines was a matter of interest. The appearance of the enlarged glands was equally as distinct from that they present in some cases of typhoid fever, as from that they present when the seat of tubercular deposit. The glands seemed really hypertrophied. They did not appear to have been the seat of continued increased abnormal vascular action, for they were neither red nor grey. The girl, I am satisfied, had committed no error in diet; about 3 oz. of boiled mutton and 8 oz. of bread were all the food she could have taken in any twenty-four hours after she was convalescent.

The importance of this case, as bearing on the value of the symptoms which are said to indicate the existence of perforation of the intestine, appears to me considerable. In the case of Emma F.—Case 34—all the symptoms said to denote the occurrence of perforation of the intestine were present; but an examination of the body after death proved those symptoms had, in her case, arisen from a much less serious lesion; in the case of Emma Temple—Case 35—all the symptoms said to denote the occurrence of perforation of the intestine were also present, but, in her case, an examination of the body after death proved those symptoms might be present without any traumatic lesion of the peritoneum, *i. e.*, idiopathic inflammation of the peritoneum may supervene during convalescence from typhus fever.

ON INVERSION OF THE FOOT IN FRACTURE OF THE NECK OF THE THIGH-BONE.

By EDWIN MORRIS, M.D., F.R.C.S., &c.,
Surgeon to the Spalding Union Infirmary, &c.

All surgical writers invariably give *eversion* of the foot as one of the symptoms indicative of fracture of the neck of the thigh-bone. Sir A. Cooper states, in his work on Dislocations, &c., "Directly that the bed-clothes are removed, two circumstances strongly arrest the attention of the surgeon—namely, the *diminished length* of the injured limb, and the *eversion of the foot* and knee." Further on, he also adds, "It is, however, proper to state, that an exception to this rule does now and then take place, and that the limb is found *inverted*, but it is of extremely rare occurrence." Believing that inversion of the foot is not so rare as has been supposed, and having met with three cases of fracture with *inversion* of the foot, within the last few years, one of them during the past week, induces me to draw the attention of surgeons to the important fact. The first case was that of an old woman, who was thrown violently out of a cart upon her right hip, after which she was unable to stand upon, or walk with the injured limb. A medical gentleman saw her about an hour after the accident, and, upon examining the leg, found it shorter, together with *inversion* of the foot. Considering the case one of dislocation on the dorsum ilii, she was removed a distance of two miles to the union infirmary. I saw the woman immediately after her admission, when, much to our surprise, we observed the foot *everted*, with shortening of the leg. There was one symptom absent, and which I could not produce, viz., *crepitus*. I considered the case one of fracture of the neck of the thigh-bone, and treated it accordingly. After about four months she left the infirmary, able to walk with a stick. The above case bears out the statement made by Sir A. Cooper, that "some hours must elapse before this *eversion* assumes its most decisive character, as the muscles require some time to become permanently contracted, and this is the reason that the accident has been mistaken for dislocation on the dorsum ilii." In the case just given, about three hours elapsed before eversion of the foot showed itself. The next case was that of a fine healthy athletic man, aged 40 years, an iron-founder, who had been thrown down whilst wrestling with one of his fellow-workmen. More than a week elapsed before he was brought to the infirmary. Believing that he had merely sprained himself, he lay in bed, and applied an embrocation procured from the druggist. Upon examining the limb after his admission, there was shortening, with *inversion* of the foot. By extending the leg, and rotating it, a distinct crepitus could be felt. After extending both limbs, I bound them together by passing a roller round both feet, and thus made the sound leg a means of support and extension for the other. After ten weeks the man was able to walk with crutches, and shortly afterwards threw them aside altogether; the cure was complete. The third and last case was that of a delicate girl 10 years of age, who, whilst playing with a child on Sunday evening, the 1st of September, slipped down upon the floor with her legs widely extended. She heard something crack, and was unable to move. She was carried to bed, and the hip rubbed with embrocation. The parents of the child thinking that she had only "bruised herself," did not call in surgical aid until Wednesday night, the 4th, when I was requested to see her. There was shortening of the leg, considerable swelling about the hip, with *inversion* of the foot, the great toe resting upon the dorsum of the foot of the sound limb. At first sight I thought there was dislocation on the dorsum ilii; but, upon taking hold of the leg, flexion and extension of the thigh were readily accomplished, and upon rotating the limb crepitation was produced. After extending both legs, I bound them together at the knees and ankles, placed them upon pillows, and left the child very comfortable. I fully explained to the child's parents the nature of the injury, and the length of time she would have to lie. Upon calling next day, the mother hoped I would not object to a "*bone-setter*" seeing the case. I did, however, object, and declined having anything to do with the case in conjunction with him. The next day the child was taken twenty miles in a gig to a noted "bone-setter" in this neighbourhood, who pulled the child about most unmercifully, and stated that he could do nothing until the swelling had subsided; when it had done so, they were to take her again, when he would "*right the bone.*" It may be readily surmised what will be the termination of the case of the unfortunate little sufferer—a martyr to prejudice and ignorance; but a truce to this, I am digressing. My object in citing the case is to show the length of time that inversion of the foot will continue, and how important it is that the surgeon should be aware of this fact, so that he may not be misled by it, and thus give too hasty an opinion. With due deference to so high an authority as Sir A. Cooper, I do not consider that *inversion* of the foot is so rare as he supposed, or that after a few hours eversion assumes its most decisive character. The two last cases given clearly show the length of time inversion of the foot may continue. In the girl's case, after rotating the leg, it immediately assumed the inverted position. I must confess my inability to account for this, and can only, therefore, record the fact. Mr. Guthrie relates a case where the foot was everted, but subsequently became inverted, and continued so several weeks. Mr. Guthrie considered that inversion of the foot takes place when the fracture extends diagonally through the trochanter major, through the medium of the gluteus medius and minimus and extenso vaginæ femoris, which draws the thigh bone forwards and rolls it inwards. I trust that the above brief observations, thrown hastily together, may have the effect of directing the attention of surgeons to the practical fact, that *inversion* of the foot may, and indeed does, often occur in fracture of the neck of the thigh bone, and thus prevent deplorable mistakes, which otherwise might happen from this treacherous symptom.

Spalding, September 18, 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

INFLAMMATION OF THE TONGUE.

The tongue is occasionally the seat of acute inflammation, which, attacking either a part or the whole of the organ, tends to rapid and enormous swelling, by which deglutition is prevented, and respiration is rendered difficult and painful. So rapid in these cases is the effusion of serum, that patients having retired to rest with only a sensation of discomfort in the mouth, have awoke in the morning with a feeling of impending suffocation. The tongue, three or four times its natural size, smooth, red, and tense, protrudes from between the jaws, which are kept permanently open: the lips are dry, the breath foul, the teeth and gums covered by an adherent secretion, a stringy frothy fluid dribbles from the mouth; the breathing soon becomes stridulous, the eyes are vacant and wandering, and the face has the appearance of great distress. The disease, if left to itself, terminates in the course of a few days in resolution; and, if the impediment to respiration be not so great as to render surgical assistance needful, there is no fear of unpleasant consequences. Several cases have fallen under my observation; the patients have mostly been either young and delicate, or advanced in life and rather infirm. In none was the disease attributable to the administration of mercury. In three cases it came on without any assignable cause; in a fourth it seemed to be connected with chronic ulceration of the fauces. De la Malle records a case of rapid swelling of the tongue in a man recovering from a bad fever; the part became thrice its natural size in the course of five hours. Trincavellius mentions two women in whom the disease occurred. One had been rubbing in mercurial ointment; the other had been suffering from small-pox. A few years ago it attacked an old gentleman with whom I was acquainted, who, entertaining some peculiar notions as to the propriety of eating meat, had kept himself for a long period of his life to a vegetable diet.

The treatment of these cases is not difficult. Considering the general condition of the patient, his usually feeble state, and previous suffering, we should abstract blood with caution. De la Malle bled a patient exhausted by a severe fever, successively in the arm, neck, and foot; such practice is obviously to be reprobated. Pimprenelle, in another case, amputed one-half the tongue, *with the view of preventing its mortification*. Such a proceeding should be consigned to oblivion, as a discredit to surgery, unless, indeed, it be recorded amongst the *facetiæ patrum*. The treatment recommended by Paletta, namely, the reduction of the part into the mouth, keeping the jaw closed with a bandage, and the frequent use of vinegar and alum gargles, would, if effectual, terminate the patient's sufferings by rapid suffocation.

In every case which I have seen, the disease has run its course unchecked: indeed, so rapid is the swelling, that there is scarcely time for any active treatment. Should the patient happen to be strong and plethoric, bleeding from the arm may be needed; but usually the application of a few leeches below the jaw is sufficient. Some astringent gargle should be used; the bowels should be relieved by enemata, and food, in severe cases, must be given by the rectum. If the swelling interferes seriously with the act of respiration, or the sufferings of the patient become greater than he can bear, speedy relief is obtained by the practice recommended by De la Malle and others, of making two or three deep incisions along the dorsum of the tongue. Active hæmorrhage ensues, the swelling rapidly subsides, and, when the organ has returned to its natural size, the incisions often have the appearance of simple superficial scarifications. As it is not desirable to wound the ranine artery, the dorsum, and not the under surface of the tongue, should be selected as the seat of operation. When, however, a part only of the tongue becomes thus enormously swelled, the organ may be twisted upon itself, so that the under surface becomes directed towards the roof of the mouth. A case of this kind occurred in the practice of Mr. Wormald, who, deeming it advisable, from the urgency of the symptoms, to make incisions into the tongue, and bearing especially in mind the situation of the artery, introduced the knife into the most prominent part of the upper surface of the swelling. He was surprised, on the following day, when the organ had returned to its natural size, to find that the scarification marking the line of incision, was at no very great distance from the frænum linguæ, and upon its under surface. The case terminated favourably.

This is the only measure upon which reliance can be placed for affording relief in urgent cases; the necessity was pointed out by the late Mr. S. Cooper, who, after reviewing the different opinions expressed as to the modes of cure, says:—

"From the preceding observations, it may be concluded, that making incisions in the tongue would have saved numerous patients, who have died suffocated in consequence of enormous enlargements of this organ."

It should be remembered, however, that this measure should not be hastily adopted; it is proper only when the respiration becomes seriously affected, or when the swelling is greater and more permanent than usual. A case illustrating the usual course of the disease occurred lately in the hospital.

Richard G——, aged 47, a thin, spare, sallow-complexioned man, of temperate habits, had for many years been subject to attacks of sore throat, which usually passed off without particular treatment. During the early part of August, he suffered from this affection, which, though benefited by the use of gargles and other remedies, never entirely left him. Two days ago, he felt ill and unfit for work; the following day the throat felt dry, and the tongue was swelled and sore; he applied, by direction of a surgeon, a blister to the throat, and took some aperient medicine. During the course of the night, the swelling of the tongue became so considerable, that he took the earliest opportunity of coming to the hospital. Admitted, August 30, 1850.

He was supported by pillows in the bed, being unable to lie down; the mouth being widely distended by the swollen tongue, which protruded as a smooth, bright red, tumid mass; a stringy frothy fluid dribbled from the lips; any effort to cough was painful and difficult in the extreme; the breath was very fetid; the breathing was stridulous, and not very dissimilar from that characteristic of croup; the eyes were vacant and wandering, and the general aspect of the patient betokened great distress; the skin was hot, the pulse quick and full.

He was bled from the arm to twelve ounces. Six leeches were applied below the angle of the jaw. An astringent gargle was directed to be used as often as possible. Food was administered by injection per anum.

Aug. 31. The swelling is diminished: he is able to breathe with greater ease, and can lie down so as to obtain rest.

Sept. 3. He is convalescent, and about to quit the hospital.

H. C.

ST. THOMAS'S HOSPITAL.

BY DR. CHARLES KIDD.

ANTHRAX AND GRANULAR KIDNEYS.

A case of anthrax or carbuncle on the back of the thigh, lately in St. Thomas's, attended with very grave and serious constitutional disturbance, is one of those rare forms of disease that deserves a notice. Carbuncle, I need scarcely say, is chiefly met with in persons of broken down constitution, about the middle period of life. Compared with abscess, (of the characters of which we had an excellent description in the *Medical Times* of the 14th inst.,) carbuncle is a much more dangerous disease; the nature of the inflammation is more severe, the sloughing of the skin and cellular tissue more extensive, the destruction of parts, and general constitutional irritability infinitely more alarming.

Henry Ulster, aged 30, entered St. Thomas's, September 3rd, 1850. He is so exceedingly feeble and ill, it is difficult to collect the history of the attack; his trade, or calling, he says, is that of greengrocer; he states that he has generally been temperate. About a month ago, without any apparent cause, a pimple made its appearance at the back of the thigh; vomiting set in, and his general health, up to

that time rather good, began to fail. Since then this pimple has been enlarging, and his whole system suffering more and more in proportion as the disease increased. As the poor man lies in bed, he appears quite prostrated by the effects of his sufferings, with a very peculiar cachectic and bloodless condition of skin, and general appearance not easily described; the tumour presents the livid, broad, flattish, well-circumscribed character of anthrax, though situated in this singular position; it discharges a peculiar sanious matter, and some pieces of dead cellular tissue.

The ordinary situation of carbuncle, we need scarcely observe, is in those parts where the cellular tissue is found most developed—the nape of the neck, about the scapula, about the nates, &c. Mr. Dixon, who saw him to-day, pointed out the singularity of the position; but I find John Hunter notices the thigh as a part sometimes affected with anthrax. A crucial incision was made into the tumour, which bled very little; large pieces of dead cellular matter came away. A chloride of soda solution, quinine, and wine were ordered. He suffers very much from prolapsus and hæmorrhoids; but it was deemed advisable not to meddle with those parts till his general health had improved.

5th.—Going on much the same way. The continued sickness of stomach prevents him taking his nourishment or wine. The ulcer looks better. He was ordered something for the vomiting; to go on with the lotion, and, if possible, the quinine.

9th.—Mr. South saw him to-day; he has been quite unable to take either his wine or his quinine. The poor fellow is manifestly worse—quite feeble and desponding; the cachectic appearance, if possible, more marked. He appears quite anæmic. It was agreed to give him small doses of hydrocyanic acid for the sickness of stomach, and brandy was ordered with his arrowroot.

12th.—No improvement since last report. It was found necessary to put a ligature on the hæmorrhoidal vessels. The generally prostrate condition of the entire system, and bloodlessness of all the tissues, prevented anything like his rallying, and he sank.

The singular mode in which extensive disease of one organ may be masked by more formidable symptoms pertaining to another not suspected, was well shown in this case. From the first day of his admittance, it was too painfully evident the prognosis was of the most unfavourable kind; the stomach seemed very much at fault—it had been bad for weeks and weeks; and yet the *post-mortem* reveals this organ healthy; the kidneys, the chief point diseased, almost universally granular.

Post-mortem examination twenty-four hours after death.—On removing the calvarium the brain and its coverings seemed healthy. On taking out the brain and cutting into it, a general bloodless appearance of the white and grey matter was the chief thing which was presented. The white matter, I think, was also harder and more fibrous than usual; the choroid plexus not of that red vascular structure it usually is, but quite pale; all the other parts normal. The cerebellum was also healthy. The lungs seemed healthy, with the exception of one or two small spots of emphysema. The heart was considerably enlarged, the left side much thickened. The chief amount of disease was, however, in the abdomen. Both kidneys, especially the left, were highly granular. In the right, some of the healthy structure of the kidney remained; the left was completely disorganised, pale, and fatty, with granular development in its cortical structure; the proper tunic of both kidneys peeled off with little effort.

The liver appeared healthy; the spleen small and contracted; the general track of the intestinal canal healthy, till near the lower end of the rectum, where very extensive disease existed; the hæmorrhoidal vessels very much engorged, with thickening and great flaccidity of the mucous membrane; the ligature had not come away, and was secured round a large piece of the diseased mass. The stomach appeared quite healthy; perhaps paler than usual, but only so in common with all the other parts. The organs of the pelvis were healthy, except of course the rectum.

On slitting open the aorta and iliac vessels they presented nothing unusual; the larger vessels about the heart also seemed quite normal. An interesting practical question was suggested by the case,—What had the kidney disease to do in inducing the anthrax? whether the anthrax, in point of fact, was a consequence of the graver disease situated in the kidney.

FRACTURE OF THE SPINE.

An old and tedious case of this nature, a considerable time in hospital, terminated fatally in the early part of last week. The man received the injury by a fall; and a large slough over the sacrum, twice the size of the palm of the hand, with paralysis of the lower extremities, for some time rendered assistance of little avail. It is not usual for a single vertebra to be broken, yet in this case there appeared little else to account for the symptoms. A very careful and interesting examination of the spine was made after death by Mr. Adams: on cutting down, and separating the muscles on each side of the spinous processes, there seemed little the matter except a somewhat bruised appearance of the parts. It was thought, during life, that one of the processes was broken and pushed on one side; but the injury to these parts was very trivial. On sawing the bones, and laying open the theca, the source of all the mischief was at once apparent. At a point somewhere about the junction of the lumbar and dorsal vertebræ, a rather sharpish fragment of bone of the body of one of the vertebræ protruded, and completely cut across the spinal column; the medullary matter at each side of the injury was considerably softened, if not in a state of complete suppuration,—in a condition, indeed, of long-standing disease, that revealed at once the source of the man's symptoms. It does not seem easy to explain how a fragment of this kind could be broken off the body of the vertebra. There was, very evidently, fracture, and possibly it may have been a rude piece of callus, Nature trying, as is ever her wont, to cure the injury. The destruction of the spinal marrow, however, was complete.

In a practical point of view, the chief thing to be recollected, in cases of this kind, is, that the higher up the spine the injury has occurred, the more dangerous it is likely to become. As a general rule, perhaps, the body of one vertebra and the articular processes of another are engaged. Severe injury of the spinous processes is not so dangerous as similar injury of the body or parts more intimately connected with the vital part contained in the canal of the bony column.

ROYAL FREE HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S.L.

FRACTURE AND DISLOCATION OF THE ANKLE—DISEASE OF THE CARTILAGES SUPERVENING—AMPUTATION.

The patient, on the night of the 11th of February returning home somewhat intoxicated, entered into a dispute with a policeman. He was sent to the Royal Free Hospital with a broken leg.

On examination, Mr. Jackson, then house-surgeon to this establishment, found that the left fibula was broken shortly above the ankle, the inner malleolus torn off, and the tibia partially dislocated inwards from the astragalus. In order to reduce the dislocation, Mr. Jackson gave him chloroform, but the spasm was so violent that the leg was elevated perpendicularly, resisting with the greatest force every attempt to bring it down, while the contraction of the peronei muscles threatened to render the dislocation complete. By continuing the chloroform, however, this spasm was overcome, the dislocation reduced, the fracture set, and the limb placed in splints.

With the exception of two sore places on the ankles, the cure went on favourably, though somewhat slowly, and, at the end of nine weeks, he was dismissed cured. He was now tried for the assault, and condemned to six weeks' hard labour; the sentence, however, was ineffective, as his arms were still useless from the pressure of the crutches used during recovery.

The air and diet of a prison began to tell on him; he certainly does not seem to have had as much meat as he could eat, and, though the wounds on the ankle healed under the treatment put in force by the prison surgeon, yet the result will show that mischief must have been going on.

He was set at liberty about the beginning of July, and, not finding his leg in a good state, came to the hospital, and was placed on the list as out-patient.

So soon as he began to move about, symptoms of a more serious kind showed themselves; and seeing that the case

was very urgent, Mr. T. Wakley admitted him as in-patient, Aug. 1st.

On admission, it was found that erysipelas was beginning on the ankle, where there was an open wound; the dorsum of the foot was œdematous and overspread with an erysipelatous flush. He was accordingly put on wine and ammonia, and beef-tea, and the best diet was freely allowed him. On the 9th of August he was attacked by severe purging, which was checked by the administration of chalk mixture and the diacetate of lead with opium, followed by quinine; these remedies only kept the diarrhœa in check, and for a long time the bowels retained a strong tendency to become relaxed. During this time the erysipelas was checked, and the matter collected on the dorsum of the foot was let out by no less than six incisions, which were required at various times for its evacuation.

This reduced the patient to the last degree; he became haggard and worn, his colour was totally gone, and he seemed wasting away every day. A collection of matter formed over the outer ankle, which poured out freely from the still unhealed wound; the joint remained acutely painful when the foot was pressed upon the leg. Grating was now detected on rubbing the two surfaces of the joint together; hectic set in, and, forseeing that the man must inevitably sink, if this state of things continued much longer, Mr. Wakley decided upon amputating the leg, which was done on the 5th of September, the patient having been rendered insensible with a very small quantity of chloroform.

In amputation of the leg Mr. Wakley always prefers making the anterior flap very much longer than is usually done, and consequently with a large curve, approximating somewhat in shape to the posterior flap. His reason for doing this is, that the cicatrix of the flap, as usually made, is exactly opposite to the projecting anterior edge of the tibia, and consequently liable to be acted on by the pressure which this undergoes from the wooden leg or any other mechanism that may be employed as a substitute for the limb. The result of this he generally finds is unsatisfactory; the cicatrix being exceedingly apt to ulcerate from this pressure, or remaining painful for a considerable time. Mr. Wakley has performed the operation many times in this way, and has had no occasion to regret doing so.

On making an examination of the leg subsequently to its removal, it was found that irremediable mischief had taken place. All around the ankle the subcutaneous cellular tissue was totally destroyed by very extensive suppuration, and in one or two places long clots of recently effused blood were found in contact with the pus, so that hæmorrhage would very possibly have soon been superadded to suffused abscess; the pus had also burrowed deep beneath the tendo Achillis, and extended high up the leg. Of the cartilages lining the articulating surfaces of the tarsus not a vestige remained; those also which invest the inferior articulating surfaces of the tibia and fibula were destroyed, so that these two bones could be freely moved on each other. The fractures had remained firm amid this havoc, and no deformity would have ensued from them, as the fractured surfaces had been well brought together. The leg was much increased in bulk, and, instead of that wasting of the fat which one might have been led to expect, it seemed considerably increased in quantity, though this was in some measure owing to the œdema, which existed to a very considerable extent.

Medical Certificates for Life Assurance.—Mr. Philbrick, surgeon of Colchester, sued Mr. Whetham, one of the directors of the National Provident Institution, in the Colchester County Court, for the sum of one guinea for a medical certificate, respecting the life of Mr. Harwood. Mr. Philbrick furnished the certificate, and made a demand at the same time for his fee, which, not being paid, he adopted legal proceedings. The plaintiff had given similar certificates previously gratis, but came at last to the determination of not doing so in future. This he stated to the agent of the office, and had on two occasions received fees, but it appeared that, in both instances, the fees were paid by the assured. The application to Mr. Philbrick, in Harwood's case, came from the secretary to the office, and not from the agent. The judgment was against the plaintiff. The judge said, had this been the first transaction of the kind between Mr. Philbrick and the office, he thought they would have been liable, and must have paid him; but, as it appeared to him, the whole depended on what had previously taken place. Mr. Philbrick was not bound to furnish certificates gratuitously, but the judge was of opinion he could not claim a fee without previous notice. The office did not apply for costs.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, October 19.—Guy's Hospital Physical Society. Eight o'Clock.

—— —— Medical Society of London. *Subject*:—Dr. Semple on some Cases of Valvular Disease of the Heart; with Observations to show that those Diseases are not so rapidly fatal as is generally supposed. Eight o'Clock.

Wednesday, October 23.—Hunterian Society. Eight o'Clock.

Thursday, October 24.—Medical Society of King's College. Eight o'Clock.

Saturday, October 26.—Medical Society of London. *Subject*:—"Upon an Affection of the Nervous System simulating Chorea." By Mr. Pilcher. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 19.

THE UNION SURGEONS AND THEIR COMMITTEE.

We have perused with great regret the late Report of the Committee of the Convention of Poor-law Medical Officers. The cause of the Union surgeons appears in danger of utter abandonment. There is throughout the whole Report a tone of despondency which could only arise from a conviction, on the part of the Committee, that their exertions will be fruitless; nor, when we read the Report, can we feel surprised at this conclusion. We cannot expect that any men, however enlisted in the cause their own feelings may be, will continue to pursue an agitation which entails much trouble and necessitates some expense, when the parties for whom the agitation is carried on manifest no interest in the proceeding, but to the most urgent appeals for sympathy and assistance reply with senseless caviling at unimportant differences of opinion, or shroud themselves behind the cloak of an immovable apathy.

It is indeed hardly credible that, when the Union surgeons have been for years complaining of their lot, and crying out to their professional brethren for redress, and when at the present time they have more reason than ever to fear that their ill-paid duties will be rendered still more irksome, and that their miserable salaries will be still more closely pared down, it is, we say, hardly credible that under such circumstances the great majority of them should not notice in any way, not even by an expression of thankfulness and sympathy, the efforts which have been made to better their condition. *Three thousand applications* were lately forwarded to the Union surgeons, for the purpose simply "of ascertaining their opinions" with respect to the formation of a Poor-law Medical League. To these applications, only two hundred and sixty-three answers were received, and of these 263, *forty-six* were refusals to co-operate, *or to subscribe one shilling* per month, and thirty-nine expressed doubts of the usefulness or success of the scheme. Under these circumstances, it would now appear, that even those most ardent in the cause are beginning to despair, and that the various medical corporations and associations decline further assistance in a matter in which so little unity and zeal have been shown by the bulk of those most concerned.

We would, however, earnestly entreat the Committee of the Union Surgeons to take heart again, and to persevere yet in their benevolent advocacy. They have a good cause, which is a tower of strength, and they have sources of vigour within themselves, of whose potency they have even themselves little knowledge. Let them persevere, and it requires no prophet to foresee that their success, at no distant date, is assured.

It would not be difficult to assign some of the reasons which have prevented the Union surgeons from showing any interest in their own cause; but, at the present time, this is unnecessary. We would rather urge upon the Committee the fact, that successful agitations have been carried on under still more disadvantageous circumstances. In the case of the Naval Assistant-surgeons, for example, the gentlemen who have so ably conducted that affair to a satisfactory conclusion were, from the circumstances of the case, unable to parade the names of those for whom they acted. The regulations and prejudices of the service prevented many Assistant-surgeons from showing any sympathy with the agitation; and examples of the hardships and indignities to which they were exposed, could only be obtained from anonymous correspondents, or by the generous sacrifice which a few individuals made of their comfort, their promotion, and even their profession. Fortunately, at the head of the agitation was a member of the service whose position ensured him from persecution, and whose character and abilities commanded attention. By the mere justice of the cause, and the employment of the most simple means of agitation, it is no untruth to say, that the day was gained for the naval assistant-surgeons with comparatively little support and assistance from themselves. And yet the Admiralty are made of sterner and less tractable stuff than the Poor-law Commissioners, who have shown themselves actually anxious, on some occasions, to amend the position of the Union surgeons.

Let the Committee remember, that if it be found impossible to band together the Union surgeons into one united league, other means of bringing the matter before the Legislature remain, which are, perhaps, not less potent. The Medical Press, if unanimous, is of no slight weight, and it invariably gives the tone on medical subjects to a certain number of the most influential of our daily and weekly journals. The first attention of the Committee should be, to secure a continued and well-directed effort on the part of the medical journals. In this they will have no difficulty, as we observe with pleasure, that our contemporaries are as much impressed with the importance of this matter as we are. The next point is, to bring the facts of the case fairly and frequently before individual members of the Legislature. The Legislature can only be influenced by a general expression of popular opinion, or by a special interest in the subject being at once raised in the mind of each member. It is impossible to create in the public generally a sufficient amount of interest in a matter which concerns such a small section of society; but it is very possible to bring the matter before the House of Commons by an equally certain, though a less conspicuous method than that which would be followed if the subject were one more immediately interesting to society at large. The medical corporations also, slow and tardy though their movements may be, must at last add the weight of their important, if sluggish, acquiescence in the general demand. By these methods, and by these alone, the Committee may rest assured that a few individuals, with a just cause, will inevitably carry their point; but we should not be surprised to find that, before very long, they arouse also among the Union surgeons that spirit of activity and unanimity, of the absence of which they at present complain so bitterly.

In commencing this agitation, it is, however, indispensable that the object sought after, and the plan by which it is proposed to be attained, should be clearly defined. Let the scheme of medical relief for the poor be drawn out fully; and when this has been done, let all who may happen to differ from it on minor matters, forego their opinions, and merge their dissension in the effort to carry the grand features, in which all agree. But after these leading principles have been decided, there should be no discussion, no variation, and no compromise. The worst of medical agitation has hitherto been, that it has been commenced before the discussion has ended, and the efforts of the agitators have been nullified by the contradictory and irreconcileable tenets of their followers, who, as in the case of medical reform, agree only in wishing for change, but diverge in a thousand ways when it is attempted to commence the change. Such unfixed principles are fatal to success.

To carry on such an agitation as this, some funds are necessary, and we would propose, (if the Union surgeons cannot be brought to aid themselves by so moderate a subscription as the Committee recommended,) that the body of the profession generally should be called upon for the same amount of monthly subscription, viz., one shilling per month. We are convinced that the appeal would be responded to, or that our enlightened professional brethren would make even greater sacrifices than this trifling one, to do away with a system of medical relief, which is at once hurtful to those who administer and to those who receive it. No great funds, however, are necessary for the purpose; the great weapons for the conflict are zeal, perseverance, and consistency; and if the Committee possess these elements of success, every other agent and aid follow of necessity. That they may be judicious in their proceedings is our anxious wish; and we can assure them, that whatever aid the able and practised pens that are now employed on our journal can give them shall be theirs.

THE "DUBLIN MEDICAL PRESS" AND MR. WILDE.

We have observed, in the last two numbers of the *Dublin Medical Press*, that which we cannot help considering as gross and unprovoked attacks upon a gentleman well known to be one of the most accomplished ophthalmic surgeons in Europe. The eminent position attained by Mr. Wilde should have saved him from such disparaging remarks as have been made upon his report relative to an endemic ophthalmia, furnished at the request of the Poor-law Commissioners of Ireland. That paper is now before the public, and will amply sustain the reputation of the writer; but it appears that the proprietor of the *Dublin Medical Press* had also been engaged on the same inquiry, and had produced a rival report, which, preceding Mr. Wilde's in point of date, he wished should also take precedence in the estimation of the Commissioners. In this desire he does not appear to have been successful,—and *hinc illæ lachrymæ*. Paltry as these petty jealousies may be, reprehension is still further necessary when we find also illiberal criticism and distorted quotations emanating from such a source.

Without entering further into the history or causes of these attacks upon Mr. Wilde, we will only add, that when a passage is quoted for the purpose of holding up the author to ridicule, it is but fair not *to leave out those* parts of a sentence, without which it is impossible the sense of the passage can be conveyed.

THE MISSING CASH-BOOKS OF THE MEDICAL PROTECTION OFFICE.

The officers of the Medical Protection Society have been engaged for some time past in the attempt to arrange the

accounts of the old office, as a necessary preliminary to the reconstitution of the society, but, in consequence of the mysterious disappearance of the cash-books, they have been unable to accomplish their purpose. It is reported that these books have been recently fished up from the bottom of the Thames, and are now lying in the hands of the magistrates of the Bow-street Police-court. It is probable that the entries in them are by this time illegible; and in that case, as the perpetrators of this ingenious device foresaw, it will be impossible to prepare an authentic balance-sheet of the accounts. As the present Council affirm that they are carrying on the society at their own expense, and we understand that Mr. Propert has, in an honourable spirit, contributed two hundred pounds for this purpose, we venture to suggest to them, that, instead of frittering away their contributions in a hopeless effort, it would be better to pay off at once all claims on the office, so far as they can be ascertained, or candidly confess their inability to reconstruct the society on the only honourable basis,—an unreserved declaration of the entire debt, and a pledge to liquidate it by a per centage levied on all commissions charged by the office.

The rates of commission must, of course, be calculated on an estimate of the expenditure, be that more or less; and any sum that is charged more than is actually necessary to meet the expenses of conducting the office, and with the indirect purpose of paying off Mr. Brearey's defalcations, must be regarded as a per centage on the commissions.

The society cannot be a trading establishment, and there can be no profits in the only rational sense of that word. Whatever sums, therefore, may be collected to refund former losses will be a surcharge upon the commissions. We are afraid that the gentlemen who have come forward to rescue the character of the office from reproach, and to prevent bankruptcy, have not deliberately calculated the probable expenditure and receipts of such an establishment; and we are quite satisfied that, ere long, they will feel it their duty to avow the impossibility of fulfilling their pledges to the profession. If, even at this late period, the acting Council would abandon the false position they have assumed, and such of them as patronised Mr. Brearey's office would throw themselves upon the generosity of the profession, they would receive a condonation for all past errors, whilst, if they persevere in their impracticable scheme, and lend themselves a second time to a palpable delusion, their good name will be irretrievably lost.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

The Report of the Committee of Visiters and Medical Superintendents of the Devon County Lunatic Asylum for the Epiphany Sessions 1848, 1849, 1850. Exeter: Trewman and Co.

These Reports we have read with much satisfaction. They sufficiently prove that the Devon County Lunatic Asylum is carefully and well conducted. We could wish that similar reports, returnable quarterly, were required from the proprietors or superintendents of private lunatic asylums, not for the inspection only of the Commissioners in Lunacy, but for circulation among the county magistrates, and among all persons who, from having relations or friends unhappily in confinement, might feel an interest in such establishments. Hereby some additional surveillance might be guaranteed which would guard against escapes and suicides, which, there is reason to apprehend, occur more frequently than is generally supposed. Hence it is well known that private lunatic asylums, speaking generally, are regarded with suspicion and distrust by the public. This, in a great measure, is also to be attributed to the mystery in which all the proceedings connected with them are shrouded. The transactions which take place in these establishments, and which are reported to the Commissioners in Lunacy, ought to be accessible to all who have an interest in knowing them. In this respect the county lunatic asylums command a confidence which private asylums, conducted upon the present system, do not enjoy.

The average number of patients in the Devon Lunatic Asylum during the past year appears to have been 372; the discharges are estimated at 46·8 per cent. on the admissions; the recoveries 42·3 per cent., and the deaths 8 per cent. on the average number resident. The statistical parts of these reports are obviously of a purely local interest; but there are some professional details given by Dr. Bucknill, which are interesting. Among the recoveries which have taken place during the past year, a remarkable one is reported of a female, aged 36, who had been in a state of maniacal insanity for 20 years. Her recovery was gradual, and extended over more than a year; she was discharged five months ago, and her recovery appears likely to be permanent. The following observations by Dr. Bucknill, on a recently much disputed topic, appear to us judicious:—

"I beg here to make a few remarks on the question, as to whether it is desirable to discharge incurable, and, as they are called, harmless patients, or, in the words of the statute, those 'not dangerous to themselves or others.' This term I believe to be inapplicable to any insane person who is not helpless from bodily infirmity or total loss of mind: it can only with propriety be used as a *relative term*, meaning that the patient is not so dangerous as others are, or that he is not known to be refractory or suicidal. It should not be forgotten, that the great majority of homicides and suicides, committed by insane persons, have been committed by those who had previously been considered harmless; and this is readily explained by the fact, that those known to be dangerous or suicidal are usually guarded in such a manner as to prevent the indulgence of their propensities, whilst the so-called harmless lunatic or idiot has often been left without the care which all lunatics require, until some mental change has taken place, or some unusual source of irritation has been experienced, causing a sudden and lamentable event. In an asylum such patients may truly be described as not dangerous to themselves, or others, because they are constantly seen by medical men experienced in observing the first symptoms of mental change or excitement, and in allaying them by appropriate remedies; they are also placed under the constant watchfulness and care of skilful attendants, and they are removed from many causes of irritation and annoyance to which they would be exposed if at large in villages, or even in union houses.

"It not unfrequently happens that idiots who have lived for many years in union houses, and have always been considered harmless and docile, under the influence of some sudden excitement commit a serious overt act, and are then sent to the asylum. One of the most placid and harmless patients in this asylum, and who is habitually entrusted with working tools, is a criminal lunatic of weak intellect who committed a homicide on a boy, who teazed him while he was breaking stones on the road.

"I trust I may be allowed, without presumption, to suggest to the medical gentlemen who have the charge of the insane poor in the different unions, that on being called to a case of recent insanity, they should not commence active treatment before sending the patient to the asylum. Medical treatment often complicates the symptoms, and in the cottages of the poor can very seldom be carried out in a manner to do justice to the skill employed. In some instances, patients have been admitted suffering from the effects of loss of blood, which had been abstracted to allay the first symptoms of excitement."

These Reports of the Devon County Lunatic Asylum are exempt from one fault which generally pervades reports of this description,—there is not a self-advertising egotistical tone about them, such as we observe in the reports of many county asylums, in which the visiters seem, like Pygmalion, to fall down and worship the idol of their own making. The present Reports are, on the contrary, written in a business-like manner, without any pretension or assumption; and we have no doubt the statistical and professional details which they set forth will be satisfactory to the country.

Du Traitement des Maladies Nerveuses par les Bains de Mer. Par S. Verhaeghe, Docteur en Médecine, &c. &c. Bruxelles. 1850.

This little *brochure* we have much pleasure in noticing. It is well written; and, if we translated its title-page freely into English, we might fairly enough designate it, "The Philosophy of Sea Bathing." The author, an eminent physician, puts forth his views in a clear and concise manner, and shows the advantages to be derived, particularly in nervous complaints, from a judicious and properly-conducted course of sea-bathing. We cannot here enter into a physiological discussion respecting the functions of the nervous system; or explore the mysteries of the great sympathetic nerve, with its complicated plexuses and organic relations; but we must give Dr. Verhaeghe credit for his practical observations in reference to the regimen which should be observed upon having recourse to the "*Cure des Bains*" in a great variety of chronic cases which scarcely yield to any other mode of treatment. Few towns are better situated for carrying out these views than Ostend, with its healthful promenade on the Digue. Invalids will there, and indeed elsewhere, find this miniature treatise on bathing an excellent handbook. It has been already translated into German, and has deservedly acquired considerable reputation on the Continent.

Dictionnaire des Alterations et Falsifications des Substances Alimentaires, Médicamenteuses, et Commerciales; avec l'Indication des Moyens de les Reconnaître. Vol. I. Par M. A. Chevalier, Professeur à l'Ecole de Pharmacie, &c. Paris: Becket. 1850.

This is an excellent practical work, by a professor intimately acquainted with the subject on which he writes. The title of the work sufficiently indicates its object, which is two-fold, one relating to pharmacy, the other to commerce. Every falsification connected with these divisions is examined in the most careful manner, and the best means of detecting them described. Many similar works of the kind already exist, but we can conscientiously recommend that of M. Chevalier as among the best.

Every Day Wonders; or Facts in Physiology. Illustrated. Pp. 137. London: John Van Voorst, Paternoster-row. 1850.

This unpretending little volume is addressed to the inquiring minds of children. In it are attempted simple explanations and illustrations by which a teacher would win the attention of the young. All the little elementary facts of our simpler physiology are well and plainly put forward. The woodcuts are excellent. To enter into anything like a criticism of the work would be a manifest absurdity. It reflects much credit, however, on the enterprising publisher, and is in every way worthy of his eminent house.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

We are glad to see the establishment of the London Epidemiological Society announced, and we augur well of its success, from the moderate and philosophical tone of Dr. Babington's opening address. The Society should take for its motto, "*Experientia fallax.*" How very little has all the wrangling on the subject of contagion and non-contagion in diseases advanced knowledge! And why? Surely, in a very great measure, because the rules of evidence and the methods of reasoning adapted to the nature of the discussions were not first ascertained and laid down in a fixed manner. The rules of evidence which suffice in physical inquiries are here wholly inapplicable. Possibility, probability, and moral certainty, are the three categories under which falls the knowledge available in the inquiries to which the Society is about to address itself. There is no room for demonstration; hardly room even for an unalterable conclusion. The first step, then, should be a system of logic adapted to the peculiarities of the kinds of truth here sought after. For which of the members of the Society will undertake to say that he sees clearly the kind of evidence requisite to establish, for example, the contagiousness of an epidemic disease such as cholera? It is a sheer truism,—and yet, how often is it forgotten!—that there can be no termination of a dispute, unless the parties agree in some common principles applicable to the case. Nay more, these common principles must lie close to the point in debate. Thus it is wholly inconceivable that any mode of reasoning should bring unanimity of sentiment about on the contagiousness or non-contagiousness of such a disease as cholera, between the men who deny altogether the contagiousness of our Edinburgh typhus, and those who, taking the opposite extreme, cling to the contagiousness of influenza as it prevailed, for example, in 1847. But parties so far agreed as to believe jointly in the unequivocal contagiousness of Edinburgh typhus, while the contagiousness of the great epidemic influenza appears to the one probable and to the other improbable, may reasonably hope, by calm discussion, with no other object but truth in view, if not to reach a coincidence of opinion, at least to reduce the subject of dispute between them to a narrow point, capable of being expressed in an intelligible form, and in that form set aside for future inquiry when new evidence shall have been collected.

We have not yet learned the plan on which the Society proposes to conduct its proceedings; but if it be designed to plunge at once into debates, whether orally or in writing, on such subjects as quarantine, without any previous limitation of the grounds on which such debates are to be conducted, we feel sure that nothing but error and confusion will be the result. But there are a great many minor notions which float in the atmosphere of medicine in regard to epidemic maladies, the foundations of which, their precise limits, and the right mode of enunciation, might be advantageously inquired into as a preliminary to entering on the great questions. For example, how far are such notions as the following worthy to be received as truths? That the unknown agency termed "epidemic influence" is a variable terrestrial influence, which may operate to the production of some diseases with the aid of contagion, and to the production of other diseases without that aid. That a certain predisposition in the individual attacked, the result of original constitution, habits of life, or accidental circumstances, is essential to the operative effect of epidemic influence either with or without contagion. That persons living in certain localities, often very limited in extent, are observed to be in a higher degree susceptible of becoming morbidly affected by epidemic influence, with or without contagion. That a contagious disease may exist in a populous place with very little tendency to spread till the epidemic influence arises, when it straightway begins to extend with rapidity. That in the case where the poison of contagion from an affected individual is essentially the exciting cause of a disease, the epidemic influence may be already present in a place without producing any effect, till the poison of contagion be imported into that place. That diseases commonly believed never to begin but from the poison of contagion, often occur without the possibility of the source from which they originated being traced out. That diseases which arise from epidemic influence without the aid of contagion spread much more rapidly over extensive tracts of country than epidemic diseases which require the additional agency of contagion; that epidemic diseases requiring the concurrence of contagion uniformly spread in the direction of the greatest intercourse of the class of persons most subject to them; that epidemic influence in many instances has been distinctly observed to spread from the east westward; that the epidemic disease which least requires the concurrence of epidemic influence with the poison of contagion, is small-pox, so that there is reason to believe that were the poison once to become extinct, the disease would cease, the epidemic influence then proving unavailing; that, though the same thing may be true of eruptive typhus, yet it cannot be pronounced with the same certainty; that it cannot be positively affirmed that there is any example of a disease which arises at one time from epidemic influence without contagion, and at another time from the poison of contagion, whether with or without epidemic influence, or, in other words, that it cannot be asserted unqualifiedly, that certain diseases arise independently of contagion, and afterwards become contagious; that when an extensive epidemic prevails, that is, when there is an unusual amount of epidemic influence, diseases generally, and febrile diseases in particular, tend to assimilate in their prominent characters to the epidemic of the season; that sudden changes of weather and the long continuance of certain kinds of weather, often imitate the effects of an epidemic influence, as when a sudden change of wind to the north-east throws numbers of children at once into croup, or the long continuance of raw damp weather makes colds very frequent, or the like continuance of hot weather renders bowel complaints prevalent; that persons visiting a place where an epidemic prevails more readily become affected than the resident inhabitants. It would be easy to swell the list of minor questions of

which these are specimens; and, though it must be confessed that many such questions involve in their solution certain determinate views in regard to the greater questions, yet, when the points in debate are narrow, and when they do not directly concern the interests of commerce and the like, there is a much greater chance that they will be debated calmly, and that the conclusions will square exactly with the evidence. There is no subject in the whole range of human knowledge on which men have thought more widely than on the theory of the spread of disease. Dr. Watson has a singular remark on this subject, namely, that he has observed the character of a man's political views determine his opinions as to the spread of diseases; that the non-contagionists are, for the most part, of liberal political sentiments. We are glad to say we know here many good Whigs in politics who are staunch contagionists. Nevertheless, Dr. Watson's observation rests on a species of foundation. Here, as in so many other questions, the tendency to spiritualism or to materialism, in a man's views of nature, affects his judgment, and that in no light degree. The disposition to spiritualism coincides with the tendency to give its full weight to contagion; the disposition to materialism has the contrary effect, and has often led to a total rejection of its influence. We are far from insinuating, that all men of liberal politics are materialists, but a person of strong Conservative feelings, with a tendency to materialism in his opinions, would be so much of an anomaly as to afford just cause for suspicion of his sincerity. Hence, then, the probable source of Dr. Watson's observation. This, however, is a serious rock a-head of the Epidemiological Society. They must lay down a creed, or else there will be nothing but endless jarring. If our advice were asked, we should say that no person should be admitted into the Society, or permitted to take part in its proceedings, who should not profess his present belief, that eruptive typhus is highly contagious, and that influenza is purely epidemic, or at least that it is improbable that contagion has any share in its propagation. Men entertaining such a common ground of faith are prepared to debate, in a proper spirit, the momentous questions which the design of the Epidemiological Society embraces.

GENERAL CORRESPONDENCE.

CHOLERA IN PLYMOUTH.

[To the Editor of the Medical Times.]

SIR,—I only recently learned, that Dr. Roe, of Plymouth, in a communication of his to the *Medical Times* of the 24th August last, contradicted some statements made by me, in a paper read before the Statistical Society, on the Nature of the Origin and Spread of Cholera in the Eighth District of Plymton, St. Mary, Devonshire. In replying to him, further delay has arisen, because I was reluctant unnecessarily to intrude upon your columns, as I believed that Dr. Roe's "explanation" did not affect the argument deduced from the *quality* of the facts; and further, as it would be apparent to any one conversant with the construction of life tables, that those shown forth in my paper could only be made from a census of the actual population in which the age and sex of every individual were distinguished.

The census of Noss-Mayo, as given by me, could not have been constructed or supplemented, as Dr. Roe thinks, "apparently on the Registrar-General's authority." It was made by going into every house, and taking the name and age of every individual resident in Noss-Mayo during the epidemic spread. I still have these notes—they show the number of houses in Noss-Mayo; the cubic capacity of the dormitories; the number of inmates in each; the age and sex of every adult and child. That "very intelligent man," the schoolmaster, I frequently saw; and I had ample opportunity to test his accuracy, and regard his opinion.

All that could be verified by actual observation or corrected by care, I endeavoured to accomplish; and I have not disregarded the authority or opinion of this "intelligent man," although declining to be ruled by him.

I believe the census of this population as given (400), was precisely accurate. I will venture to say it was not 1 per cent. wrong. I am anxious to establish the points of accuracy and care in the collection of the data of my paper.

The scope of that paper was to test the sanitary condition of a community sworn to be filthy, and held, *as of course*, to be doomed to distemper.

I had no interests to serve by inquiry, but those of truth. I confess, the many old and hale people I met with there first hinted doubts of the peculiar unwholesomeness of this valley of the black death: nor was the recking stench so notable. Released from the arid heat of the London summer, I found it smell of the ocean's freshness; and certainly its tide bore the sheen of the sea-bright wave. The "sky of brass" above struck me to be of humid lustre,—that of the clime. And, upon investigation into the duration of life of those dwellers by the polluted stream—lo! it was greatly better than that of all England and Wales, and, indeed, about the best of the healthiest in England. This, to be sure, does not tally with theory at present; it is not what ought to be, but it is the actual fact, whether the Sanitary Commissioners will have it so or no. The ratio of intensity of the grade of attack, and the tendency to death, were likewise objects of this paper; as also the state of preceding sickness, and the relation of cholera to influenza. The results are not affected, even were Dr. Roe's contradictions true.

The purpose of the paper was to prepare a statistical document, submitting ordinary questions concerning the procedure of the choleraic pestilence to numerical test; and, as such, was offered as a contribution to the Statistical Society. The Council did me the honour to accept it. Accordingly, it was read before the society, and published in their journal. It was offered by me in homage to the numerical method applied to medicine, as the only possible means of correct notation of phenomena, though receiving the contradictory interpretation of individual impressions.

The opportunity of so doing was afforded me by my friend, Mr. Bowie, one of the medical inspectors. I trust you will permit me to explain so much, as, in a work subsequently published by Dr. M'Culloch, of the 2nd Life Guards, and myself, it there appears in the appendix, without any explanation of the means afforded to collect the data, and which has been considered a faulty omission.

Trusting that I have established some claim to carefulness of investigation in this matter, and for accuracy of statement, and likewise, by your favour, have found an occasion to render some necessary explanation thereon, I remain, Sir, &c.,

A. C. MACLAREN.

29, Harley-street, Sept. 20, 1850.

POACHERS OFTEN THE SUBJECTS OF DISEASE OF THE HEART.

[To the Editor of the Medical Times.]

SIR,—I am not aware that attention has ever been drawn to the fact of poachers being frequently the subjects of disease of the heart, and yet one might reasonably expect such to be the case quite as much so as "Oxford and Cambridge men, forming the crews of the racing boats," amongst whom Dr. Hope states he has met with numerous instances of hypertrophy.

If every "circumstance capable of increasing the action of the heart for a sufficient length of time, may be a cause of hypertrophy," &c., the exciting causes in poachers may be both of a nervous and mechanical nature. They expose themselves to long-continued exertion, and their adventures are of a peculiarly exciting nature, for they are liable at any time to sudden and dreaded surprise from keepers.

Several cases of organic disease of the heart in poachers came under my notice a few years ago, whilst in extensive country practice in Leicestershire. The neighbouring lordships were strictly preserved, and the poachers were often unexpectedly surprised and closely pursued. Three cases especially came under my treatment.

Wm. Riste, aged 60, a tall, athletic man, had been a notorious poacher in his younger days. He had all the general and physical symptoms of dilatation, with attenuation of the ventricles of the heart; the liver and other abdominal viscera became greatly congested, and ascites and general anasarca, to a great extent, supervened before death.

Wm. Belton, aged forty, lived entirely by poaching. He first complained of embarrassment of breathing on any unusual exertion. I found his pulse intermittent, unequal, weak, and irregular. Auscultation detected a distinct murmur immediately over the mitral valves and in the direction of the apex, accompanying the first or systolic sound, indicating free regurgitation through the mitral orifice. The symptoms rapidly increased; he soon became unable to lie down; his countenance was anxious and bloated, and he had constant cough and expectoration of bloody sputa. He died suddenly, after being laid up a few weeks. On *post-mortem* examination the mitral valves were found thickened, contracted, and inelastic, and incapable of being accurately closed.

William Adkin, aged 40, was a short athletic man. Till within a few days of my first seeing him, he had been in perfect health. The history he gave of his illness was very interesting. He had been out a few nights before, with three or four others, poaching on the

estates of Langley Priory. They were suddenly surprised by the keepers, and Adkins was closely pursued by one of them. On coming up to a strong fence, Adkin made a vigorous effort, cleared it, and escaped from his pursuer. He assured me that, at the moment he made the leap, being at the time very much out of breath, "he felt something give way about the heart." With some difficulty he reached home, and was never able to leave it again. His first symptoms were those of great excitement; he had constant sense of uneasiness in the region of the heart, violent palpitation, quick, irritable pulse, and great heat of skin. A loud rasping murmur was heard, both with the first and second sounds of the heart, over the semilunar valves, and in the direction of the ascending aorta.

The treatment at first was strictly antiphlogistic, but the symptoms became rapidly worse, the circulation embarrassed, and the heart feeble and irregular in its action.

The venous circulation became dammed up *à tergo*; local congestions ensued, with enormous general anasarca. He died after an illness of about three weeks. A *post-mortem* examination was not permitted. There is every probability that rupture of the aortic valves occurred during the violent effort, when out of breath, and that acute endocarditis followed.

Dr. Hope observes, "Violent exercises may even occasion *rupture* and *inflammation* of the valves and aorta, issuing in incurable organic disease," of which I have seen several well-marked instances.—I am, Sir, &c. T. E. Rawson, M.D.

Liverpool, Sept., 1850.

IRREGULAR MATURATION OF THE VACCINE PUSTULE.

[To the Editor of the Medical Times.]

Sir,—Should you deem the following cases of irregular maturation of the vaccine pustule of sufficient interest to merit a corner of your valuable space, they are at your service.

On Monday, June 22, I vaccinated a fine healthy-looking child with virus received from the National Vaccine Institution. At the usual period, eighth day, there was no appearance of a pustule. On the ninth, a mere point, which, however, gradually enlarged, but did not arrive at maturity before Thursday, July 4, eleven days after vaccination, when I vaccinated another child in the same family. In this case maturation occurred on the ninth day, but the pock was extremely small.

From the same supply two other children were vaccinated. In these instances the pustulæ did not ripen before the ninth and tenth days respectively, and in one case there was considerable inflammation of the skin and cellular tissue, attended by great restlessness and feverish state of system, although the pock was extremely small.

It is important to ascertain whether spurious vaccination of this kind has any, and what amount of protective influence on the constitution. In one of these cases, where I revaccinated at the end of a week, the pustule maturated, and was decidedly larger. As, however, no opinion can be formed from a single case, perhaps some of your numerous readers who have met with similar instances and revaccinated, will state the results.—I am, Sir, &c.,

Driffield, September, 1850. John Postgate.

MESSRS. BRADLEY AND THURSFIELD.

[To the Editor of the Medical Times.]

Sir,—The personal remarks in my last paper were intended for Mr. Thursfield of this town, from whom you will doubtless receive for publication a letter of retractation, which (for peace' and quietness' sake) I sent him yesterday. Without insulting the understanding of your readers by obtruding a personal quarrel on your columns, allow me briefly to state, that the cause for my remarks was the solemn oath of the lad to me and to others, on several different occasions, (and he still offers to make oath before a magistrate of its correctness,) that *previous* to the trial he was only examined by the assistant, and that *not* in the presence of Mr. Thursfield. Mr. Thursfield has, however, assured me to the contrary, so that I now finally take leave of the subject.

I am, Sir, &c.,

T. Waldron Bradley.

Kidderminster, September 25, 1850.

[To the Editor of the Medical Times.]

Sir,—In a letter published in your number for September 21, page 321, on "A Case of Hypospadias, involving a question of Paternity," signed by Thomas Waldron Bradley, surgeon, of this place, occurs the following passage:—

"On these grounds (and making due allowance for the usual excitement during the act), I gave as my decided opinion that, though not impossible, it was nevertheless very improbable that he could become a father. The girl was then allowed, on her part, to have another surgeon to examine the lad. He, however, was *very soon satisfied, merely asking A. B. 'if he could make water?'* and, on receiving for answer, 'A little sometimes,' told him, *without any examination*, that he 'could get a child as well as any one;' and, on deposing to that effect before the magistrates, they—he being my senior in the profession—decided that the lad was the father of the child, and ordered him to pay 1s. 6d. per week for its support. Now, I will not say the decision rested on the evidence of this so-soon-satisfied witness, but I do think, in a case where a vital question is at issue, a little more care should be bestowed by the surgeon who has to pronounce on so important a point. Had I again a similar case, I should again give a like decision, and for the reason I have named."

On reading this, I addressed a note to Mr. T. W. Bradley, to inquire whether the paragraph commencing with the words, "He, however, was soon satisfied," and ending with "so important a point," was meant to apply to me. In the course of the day I received a note from him, stating that he meant the words strictly to apply to me and to no one else.

On referring to the notes taken by the town-clerk in the case, I find the first answer given by me is thus set down:—

"*I have examined Webb*, and my evidence is recorded, that I, from the appearance of the parts of generation, thought it possible he might be the father of a child. I think, if he had connexion with a woman, he could get a child; he has *only one testicle*. I find the penis with no orifice at the proper place, but with an orifice underneath and below the frænum," &c., &c.

Now, what will you think, when I tell you, that Mr. T. W. Bradley was present during my examination *on oath*; that he must have been aware that I could not have minutely described parts which I had never seen; that he himself had been *so very careful in his examination*, that he swore the lad had *two testicles;* and yet, notwithstanding all this, that he published the paragraph he did? Feeling that the matter could not remain as it did, I sent a medical friend, demanding that he should withdraw the whole of the statement, which he declared applied to me, fully and unconditionally, or take the consequences. After stating to my friend, that he had been informed by the boy; (an interested party, of course,) that I had not examined him, he, after a great deal of trouble, wrote me a note begging to withdraw the whole paragraph in question. Now, as you published his letter, and I ever found you very just, I must beg that you will give mine an equal chance of being read. I did examine the boy most minutely, both before and after the examination before the magistrates, and each time in the presence of a third person. I discovered that there was but one testis in the scrotum; and what will your readers think when I tell you, that this wonderful case of hyopspadias—this narrow opening, which, it seems, none but the "exploded dogma of the aura seminalis" would fit—freely admits *a large No. 3 silver sound?*

Oh, ye hypospadiac fathers of children! Oh, ye poor wretches, whose strictured urethræ cannot even admit a small cat-gut bougie! Are ye, too, to have no alternative but to revert to the exploded dogma of the aura seminalis?—I am, Sir, &c.,

Thos. Thursfield, Surgeon.

Kidderminster, Sept. 24, 1850.

THE HOMŒOPATHISTS.

[To the Editor of the Medical Times.]

Sir,—In the last number of your journal, October 12th, you have ventured to pen some very ungenerous and uncourteous remarks, and indulged yourself in certain unseemly epithets, towards a class of professional men who have had the manliness and courage to examine the claims of homœopathy, and, having become convinced of its truth, had the honesty to avow openly their adhesion. I am aware it would not be congenial to the prejudices of your readers were you to allow the pages of your journal to receive contributions favourable to the support of the homœopathic law, therefore I will not waste your valuable time or my own on that matter. I have to ask your indulgence, however, while I correct some inaccuracies having especial reference to myself in the number of your journal above alluded to,—inaccuracies which, if left unnoticed by me, would, in the eyes of some of your readers, no doubt tend to affect my moral integrity. I will therefore point

them out, and beg to request that you will, in common fairness and honesty, insert this communication in your next journal, October 19th.

In the list of medical officers appointed to the Hahnemann Hospital, you have dealt with my name as follows:—

"D. Wilson, M.R.C.S.E., *i. e.*, Member of the Royal College of Surgeons of England, but, in reality, *is a licentiate* of the Royal College of Surgeons of Edinburgh (that college has no members.)"

Now, Sir, if you will refer to the "Medical Directory," you will find that I have ever been proud to acknowledge the source from whence I obtained my diploma, as you will invariably find that I have appended "Edin.," to prevent any mistake; and, if my memory serve me, when I *first* filled up the return paper for the "Medical Directory," I then styled myself *licentiate;* but, supposing I had been in error in styling myself Member, I conceive it would have been proper for the editors of that Directory to have corrected me. If they have, in the various editions of that useful work, erred, you might have spared your remarks—at all events divided the onus of the offence betwixt us.

Although, on the occasion which has afforded you the opportunity for this insinuation against me, I am not the party to be blamed for the accidental omission of *din.* after the E., it would seem questionable whether the London members have any *legal* right superior to my own for the appropriation of the capital E., seeing the same stands for Edinburgh as well as England; besides, three of the gentlemen you name as my brother officers, and who are Members of the London College, merely append M.R.C.S. after their names. I suppose it was from the said Directory you ascertained I was an Edinburgh surgeon. I have yet to learn the difference between an Edinburgh licentiate and a London member, saving that the general and diversified examination of the former, in comparison with that of the latter, would, as far as examination can be considered a test of qualification, entitle the Edinburgh surgeon to rank with the physician in his qualification to practise medicine and surgery. You seem not to be aware of the following fact recorded in the students' number of the *Lancet*, September 28th, 1850: "The licentiates of the Royal College of Surgeons in Scotland and in Ireland are *exactly* on the *same footing in England as to privilege in surgery* with the *members* of the Royal College of Surgeons of England." But what appears to me singular indeed, is, that you should publish a note to the very same effect in your journal of October 5, *the journal preceding* that of the 12th, in which you have published the comments that call forth my present remarks. The "Medical Directory," then, will prove that I volunteered the source of my diploma, and so will my address to the subscribers of the Hahnemann Hospital, a copy of which I enclose for your satisfaction, (which will show you I only solicited to be "one of the SURGEONS,") with testimonials appended, which I think will prove to you it would be unjust and untrue, were you to persist that I am an illegal practitioner in surgery, and that I did not, in that respect, stand on an equal footing with members of the Royal College of Surgeons of England. As to my "having failed to gain the *loves, i. e.*, notoriety and cash, by the aid of legitimate medicine," and having, consequently, been stimulated to offer myself up, "for the purpose of securing them, on the shrine of homœopathy," I beg to inform you, that I enjoyed a very large and lucrative general practice in Pimlico for many years, up to the period of my leaving Eccleston-square in 1848, and which is still of sufficient extent to be carried on by *two* successors with equal success.—I am, Sir, &c.

22, Brook-street, October 15, 1850. DAVID WILSON.

[If any of our readers will take the trouble of referring to a late number of the *Times* newspaper, they will find that, as we stated, the letters M.R.C.S.E. are appended to the name of Mr. Wilson. These letters have had assigned to them, by general consent, a certain significance—*i. e.*, "Member of the Royal College of Surgeons of England." If Mr. Wilson, being a Licentiate of the Royal College of Surgeons of Edinburgh, advertises himself in the newspapers as M.R.C.S.E., he must expect that the profession will consider him as claiming a title to which he has no right. He cannot alter the facts. The final letter "E" does not, in the usual practice of the profession, stand for Edinburgh; and the term "member," which is not used by the Edinburgh College, would also lead any one to believe that Mr. Wilson belonged to the London College. So much for his complaint against us, which is entirely frivolous, and not worthy of reply. The latter part of Mr. Wilson's letter claims, however, a little more consideration. If the circumstances are stated correctly, and if Mr. Wilson has at one time been a successful orthodox practitioner, we are truly sorry to find him in such very bad company. We should be very glad to know on what grounds he has deserted our ranks; and we give him a direct challenge to state his reasons for so doing in these pages. It is not true to say that we have ever refused any exposition of the doctrine of Hahnemann which has been offered to us. Some few numbers back, a correspondent, who signed himself "One who calls himself a Homœopathist," having offered to answer a letter from one of our most esteemed contributors, we invited him to do so, provided he would confine himself to the examination of the fundamental homœopathic dogma, "*Similia similibus curantur.*" We now give the same invitation to Mr. Wilson; and for our parts we undertake to maintain against him, that this Hahnemannian precept is utterly without proof—that it is a mere hypothesis, based on no sound knowledge, and unsupported by anything except the vaguest analogies, or the most flimsy and ill-conducted experiments. Only we beg Mr. Wilson to spare us any discussion on that absurd practice of infinitesimal doses, which could be proposed only by a madman, and can be practised only by knaves, or by those who are, as we hope our correspondent is, deluded by specious arguments which they have not fully analysed. We also beg Mr. Wilson to avoid any reference to cases for which he is not himself answerable. The greater number of cases which are quoted by homœopathists, and which form the materials of their Statistical Tables, have either been recorded by men who are not capable of making a correct diagnosis, or have been positively invented for the occasion. We will not take into calculation any facts except they have been observed as accurately as analogous facts would be in the strict sciences of chemistry, astronomy, or the like.

There is one expression in Mr. Wilson's letter which we must notice. He says we have "ventured to indulge ourselves in unseemly epithets towards a class of professional men," &c. We quite admit this charge. We *have* "*ventured*," we *now* "*venture*," and we *shall* "*venture*," to do our duty. Believing as we do, that the practice of homœopathy is totally without scientific basement, and that, being a "FALSEHOOD," and a gigantic falsehood, it *must* be productive of a vast amount of harm to the human race, if its progress is unchecked;—believing as we do, that it aims at the subversion and bringing into contempt of the most useful art the world can know, we should be guilty of treason towards truth and our own consciences if we did not "*venture*" to combat this monstrous lie. In the same spirit, though at an immeasurable distance, we can say with the Apostle, "woe to us if we preach not the Gospel,"—woe to us if we hesitate to proclaim what we believe to be true, and to combat with all the strength we have against error and untruth.

We have received on this subject a most ungentlemanlike letter from a person who signs himself "J. Chapman, M.D.," of Grosvenor-street. When Dr. Chapman writes a letter which savours more of Cambridge, (to which learned university this homœopath claims to belong,) and less of Billingsgate, we will insert it; but till then we shall consign his letters to places more appropriate for them than our columns.—ED. *Medical Times.*]

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

October 12, 1850.

Dr. J. R. BENNETT, President, in the Chair.

THE amalgamated societies took possession of their new apartments at the West-end on Saturday evening last, when the session for this winter commenced, under the presidency of Dr. Bennett. The meeting room, which is approached through the library, will accommodate about 100 persons, and by eight p.m. it was full, but not crowded. The united societies seem likely to prosper. Certificates in favour of nearly thirty candidates for membership were read. They will be balloted for on a subsequent occasion.

Dr. Bennett, the President, in commencing the proceedings of the evening, expressed his hope, that the same exertions which had successfully accomplished the union of the two societies would be continued throughout the session, to secure all that the most sanguine could hope for. We give the following passages from the address as nearly as possible as they were delivered:—"Our position and circumstances this day prove that our society partakes of that vitality which is characteristic of British institutions. We have sought to imitate the wisdom of our political legislators, by interweaving the new with the old, according as the changes produced by time and the progress of society appeared to demand, rather than the example of our Continental neighbours, by demolishing our old institutions, to rebuild on new and untried foundations. We may be said to have passed through one of those alternations of generation of which naturalists have lately spoken, and to have entered on a new phase of our existence. But, if any are disposed to entertain doubts of our identity, I am satisfied that, ere this session shall have closed, there will be no longer any grounds for such doubts. It needs, indeed, a profound philosopher to tell us in what identity consists. But, however the external form may vary, and however great may be the differences of circumstances and place, so long as the same mind acts, the same motives influence, and the same spirit animates, we have the best proof of identity that can be afforded. Let, then, but the recollection of the past animate us, and let us but prove true to ourselves, and our society cannot fail to realise all that it was intended to accomplish. How many and important are the advantages which such an association as this is capable of conferring, I need not inform any now present. Nor will I occupy your time by detailing the various regulations that have recently been agreed on, after much anxious deliberation, with a view to render the society as useful as possible, not only to its members, but also to the profession and to the public at large. Constituted as the society now is, it appears to me well calculated to meet the requirements of the profession at the present time. What can be better calculated than such an association as ours to foster that brotherly feeling, and promote that union, which, as a profession, we so much need? What more convincing practical demonstration can be afforded of the unity and indivisibility of medical science, than the co-operation and association of its cultivators, for their mutual improvement and the advancement of their common profession? In what way can we more readily and thoroughly sift and test those various doctrines and practices which day by day are startling us by their novelty? Doubtless ours, like every other science, is one in which facts are all-important; but we may be said not so much to need facts themselves, as a knowledge of their true interpretation and right application. Every system of quackery can appeal to facts in its support; and we hear much, in the present day, of the mighty array of facts which that monster delusion, homœopathy, can adduce in support of its infinitesimal claims on the attention of men of common sense. But in medicine, above all sciences, every fact requires to be examined in various lights and points of view, before it can be safely made available. As the microscopist examines his object not only by glasses of various powers, by various lights, and with the aid of various re-agents, in like manner every so-called medical fact needs to be considered in various relations and aspects, before we can arrive at its correct interpretation and right use. Nothing has frequently more struck me than the advantage which, in this respect, is afforded by such an association as ours. A carefully observed fact may be faithfully detailed by one man, who shall draw from it a certain conclusion; but, immediately on its being presented to the consideration of another man, whose mind has been working in a different direction, it assumes a different aspect, and leads him to a different inference. In conclusion, I would express my confident hope that our proceedings will be characterised by no spirit of detraction or petty jealousy of analogous societies, and that our discussions will always be conducted in such a way, as shall conduce to the attainment of the great objects for which we meet, the elucidation of truth and our own improvement, and thus ensure the advancement of our profession and the welfare of mankind." The President then announced, that the gentlemen elected as Lettsomian Professors, had accepted the appointment; and that Mr. Guthrie would lecture "On the Means adopted by Nature to arrest Hæmorrhage from the larger Arteries;" and Dr. Rees, "On the Pathological Indications afforded by the Urine."

EXTRA-CAPSULAR FRACTURE OF THE NECK OF THE FEMUR.

Mr. Coulson exhibited two specimens of fracture of the neck of the femur external to the capsule. In the first specimen, the patient, a man seventy-seven years of age, had considerable effusion around the joint, with great pain; there were also eversion and shortening of the limb. The man died from exhaustion at the end of the month. The examination of the joint after death showed that there were two fractures, one perpendicular, from the neck of the femur from without inwards, between the two trochanters, and the other behind, involving both the trochanters. In the other instance the patient was an aged female, seventy-six years of age. Her symptoms were similar to those in the preceding case, but there was less suffering; she survived the accident for three months, sinking ultimately from the irritation and exhaustion caused by bed-sores. This fracture resembled the first, as regards that of the neck of the bone, but the complication respecting the trochanters was somewhat different, inasmuch as the trochanter major only was fractured. Mr. Coulson drew the attention of the society to the fact of the co-existence of the fracture involving the trochanters with that of the neck of the femur; and he stated, that Mr. Smith, in his work on Fractures, had asserted that in one hundred examinations made by him, the double fracture was always present. Mr. Smith referred the fracture of the trochanters to the force with which the broken portion of the neck of the femur is driven into the cancellated structure of the upper part of the shaft.

Dr. Bennett then read the following paper on

DIPHTHERITIS.

The peculiar form of pharyngeal inflammation which has been so ably investigated and so well described by Bretonneau, and to which he gave the name of Diphtheritis, is a disease comparatively little known in this country. Some of our best authors make no mention of it. Many practitioners have never seen it. And though we can by no means assent to the accuracy of the views taken by Bretonneau and other French writers, as to its identity in certain forms or complications with the ordinary true inflammatory croup of this country, yet those only who are practically acquainted with the disease, as well as with its history, as detailed by the French writers, can judge of the grounds for inferring a relationship between the two. The disease has usually appeared as an epidemic rather than as a sporadic affection, and, like most other epidemic diseases, has doubtless varied somewhat in its aspects, with variations of the epidemic constitution. Hence, also, the different names which there is good reason for believing have been given to the same disease. For, whilst by some it has been confounded with and described as croup, it has by others (and this more frequently) been designated as angina maligna, or malignant sore throat. At all events, the disease which Bretonneau described was, previous to his investigations, considered to be characterised by extensive and malignant ulceration of the throat as its most prominent feature, and there is sufficient evidence in the writings of our own countrymen to prove, that under the designation of croup, or of some analogous term, diseases have been described which primarily were diseases of the pharynx. But the investigations of Bretonneau demonstrated that, except in the rarest cases, the formidable epidemic angina which he described, was unattended by sloughing, or even by ulceration of the mucous membrane. The comparative infrequency in this country of the disease to which Bretonneau gave the name of Diphtheritis (but for which angina membranacea is a preferable term), may to a certain extent account for the paucity of any very accurate or precise information respecting it as a British disease. There are not wanting, however, accurate and distinct histories of the malady, in the records of British medicine, and doubtless there are many medical men who have had practical acquaintance with it. The investigations and views of Bretonneau are indeed sufficiently well known among us. But, unless I am mistaken, there are comparatively few who can say that they have tested by their own observation, the accuracy of the pathological views of Bretonneau. For this, as well as for other reasons, I have been induced to bring before the society, a few cases which have fallen under my own observation in the course of the present year, and, after having detailed these cases, I will venture to throw out one or two observations as to their pathology and treatment.

Dr. Bennett then detailed the cases alluded to, and concluded as follows:—

The first point to which I would call attention is the epidemic character of the disease. All the cases I have mentioned, and

others of which I have heard, occurred about the same period of the year. With respect to the question of contagion, without venturing to express any decided opinion, I may observe, that the first and the last cases mentioned occurred in families where there were other children, who were not separated: some of them took the disease. The French writers are pretty unanimous in attributing a contagious character to the disease. With the exception of the first case, all the children were apparently in good health when attacked; in all, the disease was of an adynamic type; languor and depression of system from the first characterising all the cases. In all, the throat affection had attained a very serious and formidable character before there was either much difficulty of swallowing or external swelling, and before there was any difficulty of breathing, or other symptom referrible to the larynx or lungs. There was nothing like preceding catarrh in any of the cases. Stomatitis prevailed at the same time, and my own observation would lead me to concur with most of the French pathologists in assigning a close relationship between this affection and diphtheritis, if not an absolute identity. But it may naturally be asked, Does not the existence of ulceration in the one case, and its absence in the other indicate an important pathological distinction? To this it may be replied, that stomatitis is essentially characterised by the same fibrinous exudation, and that, although ulceration does undoubtedly frequently attend it, the great similarity of appearance in the two conditions often leads to the supposition that there is more ulceration than actually exists in ordinary cases of stomatitis. I have frequently had occasion to observe, on the separation of the ash-coloured patches, around which the mucous membrane was red and tumid, so as to give them the depressed form as well as colour of ulcers, that the mucous membrane was still entire. It must, however, be admitted, that whilst it is only rarely that ulceration attends the disease, when confined to the fauces and soft palate, as a general rule, when assuming the form of stomatitis, there is more or less of ulceration associated with the fibrinous exudations. This may perhaps depend on the difference of situation, the inflamed membrane in the one case being more exposed to mechanical and other sources of irritation.

As to the general or constitutional symptoms, there is the closest resemblance; and I believe that the same general plan of treatment will be found applicable to both sets of cases. The fact also of the two affections having very generally been found to prevail at the same time renders it highly probable that they are the result of the same general cause.

This question of relationship with the more common affection (in this country at least) of stomatitis is, I think, important as regards treatment. For many years I have now been in the habit of prescribing the chlorate of potash in the stomatitis of children, and with such marked advantage, that I cannot doubt its exerting a peculiar and specific influence. Of its great superiority over the more ordinary plan of giving mercurial alteratives, I have myself no doubt. Mercury has appeared to me to be of very questionable utility in most cases, and in others to be positively prejudicial.

Looking at all the varieties of these mucous inflammations characterised by fibrinous exudations as different manifestations of the same general condition of system, we must, I think, admit that the type of the disease is essentially adynamic, and that the peculiar tendency to fibrinous exudation is indicative of a low form of inflammation. I am not aware that any analyses of the blood in these affections have been made, so as to determine whether the remarkable tendency to fibrinous effusion is indicative of any real excess of fibrin in the blood. But even if this were so, it would be no proof of a sthenic condition. On the contrary, the investigations of Andral and Gavarret and others have shown, that in erysipelas and other diseases characterised by an asthenic or adynamic type, the proportion of fibrin is considerably augmented. And we know practically, that in low forms of inflammation, and in various cachectic states, in which there is also a superabundance of fibrine, a tonic plan of treatment is indicated. In fact, a tendency to fibrinous effusion is rather indicative of peculiarity than intensity of inflammatory action. Such considerations appear to me important in connexion with the treatment of the most formidable complication of angina membranacea, viz., that of secondary croup. Apart from all considerations as to the utility of mercury, most British practitioners would concur in admitting the efficacy of early and decided antiphlogistic measures in the treatment of true primary croup, *i. e.*, acute inflammation of the larynx and trachea, commencing in the air passages, and occurring as a sporadic disease. But in the laryngeal complication of diphtheritis we have, I believe, a totally distinct disease to grapple with. The immediate danger to be apprehended in both cases, it is true, is much the same. And, doubtless, to obviate a new source of imminent danger, we are justified in the employment of remedies that we should otherwise gladly abstain from. But my own observation, as well as the consideration of the results of such practice as detailed by others, have convinced me that depletion, calomel, and antimony, and all other powerfully depressing agents, if used at all, must be very sparingly and cautiously employed, and that we cannot trust to them except as perilous means of warding off for a time the most imminent danger, and thus affording opportunity for the employment of other means more adapted to the general character of the disease. The immediate and important relief frequently obtained from emetics in the treatment of ordinary croup is well known, and I believe that by their aid the most urgent danger will be best obviated in the cases under consideration. But, viewing the local affection, whether confined to the pharynx or extending to the larynx or trachea, as a peculiar and specific form of inflammation dependent on a specific morbid condition of the system, the question naturally arises whether we should not seek for specific means of treatment, both local and general. Almost all forms of pharyngeal inflammation are peculiar as regards the influence exerted on them by topical remedies of a stimulant character; and in their early stages are frequently, to a remarkable degree, under the control of such agents. This is especially the case when there is a marked tendency to spread. Bretonneau, and almost every writer who has described the disease in question from personal observation, concur in the important influence of topical agents; among which nitrate of silver and strong hydrochloric acid have been found most useful. The power of these agents, in modifying the peculiar morbid action, and checking the tendency to spread, has been abundantly proved; and as the principal, though not the sole danger in diphtheritis is the tendency to spread and implicate the larynx, it becomes of the highest importance to arrest the progress of the local inflammation as speedily as possible. So long as the larynx is unaffected, the local symptoms, and, it may be, the general symptoms also, are frequently of so comparatively mild a character, that the practitioner is apt to be taken off his guard; and it frequently happens that but little apprehension is excited, till the sudden occurrence of croupy symptoms places the life in imminent jeopardy. If there be not much swelling or dysphagia, and so long as the fibrinous effusion is in small detached patches, it may not be necessary to interfere by local agents of the more active kind; but the throat should be constantly and carefully watched, and whenever there is evidence of the tendency to spread, as characterised by the coalescence and extension of the fibrinous patches, no time should be lost in applying either the nitrate of silver or hydrochloric acid freely to the affected parts. And this may generally be done with great ease by means of a curved probang armed with a piece of sponge, whilst the tongue is depressed and secured by means of a proper spatula. As respects general remedies, I have already stated that I place great faith in the chlorate of potash, either alone or combined with dilute hydrochloric acid. At the same time, it will generally be requisite to sustain the powers by means of beef-tea and wine. It has never occurred to me to see the disease, whether affecting the pharynx or the mouth alone, associated with general symptoms of such a character as to justify any other than a tonic plan of treatment. Nor have I seen the cutaneous complication which has characterised some epidemics; but the tendency to cutaneous inflammation associated with the same fibrinous exudations is sufficient, apart from other considerations, to justify us in deprecating the employment of blisters.

But I have already occupied too much of your time. It was not my intention to attempt a complete account, however succinct, either of the disease or the treatment; I have wished merely to place the subject before the society in such a way as to direct their attention to what appears to me to be the most important practical points. I will however, venture, in conclusion, to say that I have been led to look on the disease as the result of a specific epidemic influence, operating on the system through the blood, characterised by an adynamic type, and calling for special treatment; and that, however much the general symptoms may be modified by the occurrence of laryngeal complication, the secondary croup which then sets in is a distinct affection from the common sporadic croup of this country, and not amenable to the same treatment; that local treatment, whether in the simple or complicated forms, is of the utmost importance; and that the more common form of stomatitis is essentially the same affection as that which attacks the pharynx. As, however, the term stomatitis, like that of croup, has been applied in the most confused way to various totally distinct diseases, I ought to say that, in using this term, I restrict its application to the buccal affection chiefly seen in children, and characterised by the effusion of fibrin and spreading superficial inflammation, and excluding, on the one hand, the more trivial cases of aphthæ and infantile thrush, and, on the other, the still more formidable can-

crum oris, or sloughing inflammation of the cheek. I have made no allusion to diphtheritis, as affecting the adult, because I have never seen a well-marked instance; but I have reason to believe that several cases occurred last summer, and the well-known paper of Louis, on Croup in the Adult, describes, in fact, cases of angina membranacea, complicated by extension of the disease to the larynx.

Dr. Webster remarked, that the disease in this country was much more rare than it was abroad. He had, however, seen several cases many years ago with Dr. Webster, of Dulwich, two of which proved fatal. It was very common, and even epidemic at Tours, where Bretonneau resided. Tours lies in a damp, low situation, with the Loire on one side, and the Cher on the other. He (Dr. Webster) had attended the medical congress held at Tours three years ago, when Bretonneau stated the results of his increased experience. In addition to the application of the solution of nitrate of silver, in some cases tracheotomy had been performed, and the solution applied internally. The solid nitrate had also been introduced into the windpipe, and passed upwards to the larynx. The paper had not yet been published, owing, as he (Dr. Webster) thought, to the disturbances caused by the Revolution. The practice, therefore, had not yet been introduced into this country. His own opinion was in favour of the use of the solution, as employed by the president. He agreed with Dr. Bennett, that great caution was requisite in giving debilitating medicines. He would not advise the use of calomel and antimony; but, on the contrary, would recommend tonics and strengthening remedies, as the disease was one of debility. Bretonneau was not now, he believed, so strong an advocate of calomel in the treatment of the disease as he had been formerly.

Dr. Webster, of Dulwich, said, that the cases just alluded to had occurred in a house situated like Tours; it lay low and between two ponds. When symptoms of laryngeal affection complicate the disease, the case is attended with great danger. He had seen three or four more cases about the time that Higginbottom's work on the nitrate of silver was published, and was led to have recourse to the solution of that salt, in the same manner as practised by the president, and also externally as a counter-irritant. Tonics were given at the same time, but no calomel. His plan was followed in four cases with success; the fifth ended fatally from croup. The disease is rarely fatal, unless the larynx be involved.

Dr. T. Thompson narrated a case in an adult, which he thought was somewhat analogous to the cases described by the president. It occurred at the latter end of May. The patient was a man about eighty-two years of age, living in a healthy situation, on an eminence near London. His first symptoms were loss of taste, with considerable languor and depression, and the tongue slightly furred. After a time the voice became croaky, and there was a pellicle covering the whole of the inside of the mouth as far as could be seen. It separated in a few days, leaving an irregular, red, and angry surface. After the lapse of a fortnight the pellicle again formed, its appearance being preceded by slight fever; it pursued the same course, re-appearing after the lapse of another fortnight. The patient ultimately recovered. With respect to Dr. Bennett's query, as to the excess of fibrin in the blood, he (Dr. Thompson) thought it not impossible, in proportion to the mass of that fluid. His own patient had suffered occasionally from inflammation of the veins. With regard to the treatment, he had given the chlorate of potash with great advantage; had applied borax while the pellicle was adherent, and demulcents afterwards; mercury had been given after the first attack, for suspected phlebitis, and salivation was induced. To this he referred the second occurrence of the pellicle. Tonics and good diet were afterwards given, and once or twice a mild aperient when required.

Mr. Hird had related a few cases of the disease some years ago, at a meeting of the Westminster Medical Society, his object then being to point out the evil consequences of mercury in its treatment; he was glad to find his views on that point corroborated. He had tried two plans of treatment—one the use of chlorate of potash; the other Brandish's alkali. Both were serviceable in the early stage. The last-named remedy he had been induced to try on account of its influence in dispersing tumours. A period soon arrives in the disease when other medicines must be used; the patient falls into a state resembling collapse. To combat this he gave the decoction of senega with ammonia and port wine, after checking the tendency to the exudation of lymph. He had found this plan of treating the disease very useful.

Dr. Ogier Ward commended the internal exhibition of alkalies in the treatment of this disease, and referred to an American paper in corroboration of his views.

Dr. Crisp alluded to a paper recently published in the *Revue Médicale*, as containing a better account of the disease than Bretonneau had given. He said that it was epidemic in Paris a few years ago, and had caused the deaths of hundreds of children. Trousseau was the first to use the nitrate of silver. Out of forty cases of the disease in which Trousseau had performed tracheotomy fifteen recovered. In a case of croup, in which he (Dr. Crisp) had performed that operation, he had applied the solution of the nitrate of silver, which appeared to do good. The patient ultimately died.

Dr. Murphy drew attention to one point in the paper before the society, where reference was made to diseases which seem to be of inflammatory origin, but in reality depend upon specific causes. He thought the chlorate of potash and chlorine acted by destroying the morbid poison in this disease, which would otherwise pursue a definite course, while the application of the nitrate of silver cured its local effects. The chlorate of potash acted in this disease in the same manner it was shown to act some years ago by Dr. Hunt in cancrum oris.

Mr. Toynbee inquired, whether the fibrinous exudations had been examined under the microscope, and, if so, what was the nature of their structure?

Dr. Bennett replied, that it was closely analogous to the ordinary fibrous exudations on the surface of serous membranes.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 11th inst.:—

Aldred, Henry Allen, Blackfriars-road.
Baker, John Wright, Derby.
Browne, William, Southampton-street, Bloomsbury.
Harley, George, Haddington, Scotland.
Henson, Sidney, Hull.
Heron, William, Belfast.
Holland, Thomas Seward, Cork.
Walker, John West, Spilsby, Lincolnshire.

The Fellowship.—The Court of Examiners of the Royal College of Surgeons have just announced, that the next examination for this distinction will take place at the College, on Wednesday, the 6th of November next, when the junior candidates (viz., members of eight years' standing) only will be examined in Classics, Mathematics, and French; and on the 3rd and 5th of December next the professional examinations will take place.

The College Registration.—It may save many of our young friends considerable annoyance, by reminding them of the necessity that exists for registering their hospital tickets at the College of Surgeons any time from the 22nd to the 31st inst.

Military Appointments.—69th Foot: Staff Assistant-surgeon Alex. Brown Cleland, M.D., to be surgeon, vice John Bathurst Thomson, M.D., deceased. Hospital Staff: Assistant-surgeon John Riggs Miller Lewis, M.D., from the Rifle Brigade, to be Staff assistant-surgeon, vice Cleland, promoted in the 69th Foot.

Naval Appointments.—Surgeon: C. P. Blake, M.D. (1845), to the Geyser; Andrew Murray (1846), to the Imaum, at Jamaica; John Davidson (1845), for service at Ascension. Assistant-Surgeon Henry Loney (1846), to the Geyser.

Medical Society of London.— G. J. Guthrie, Esq., F.R.S., and G. Owen Rees, Esq., M.D., F.R.S., have been elected the Lettsomian Professors for the session 1850-51; and the following gentlemen members of the Sectional Committees on Medicine, Surgery, and Midwifery:—*Medicine*—Drs. Webster, Sibson, J. R. Bennett, Copland, Babington, Garrod, Lankester. *Surgery*—Messrs. Hancock, Dendy, Pilcher, Erichsen, Hird, Hilton, Toynbee. *Midwifery*—Drs. Murphy and Chowne, Mr. Greenhalgh, Drs. Merriman, Smiles, Waller, Lever.

Obituary.—On the 5th inst., at Worcester, James Swift, Esq., surgeon R.N., aged 76.

Queen's College, Birmingham.—Prof. Sands Cox, F.R.S., commenced the course of surgery at this Institution on Tuesday

evening last. The professor took a comprehensive view of the history of surgery from the earliest times to the present day. He stated the great principles of the science, and, as preparing the students for the ensuing course, defined the leading terms which are employed. He concluded with an eloquent encouragement to an ardent and persevering pursuit of scientific tasks. There were present, besides a large body of students, the warden, and several members of the council; and at the close of the lecture the Rev. Prebendary Gray, Warden of the College, said that, considering how interesting was the occasion on which they were assembled, he could not but request them to join with him in offering their congratulations to the professor. That gentleman had completed a quarter of a century of medical instruction, and was now entering upon his twenty-sixth year of labour. It would be a matter of congratulation to any professor to have continued his scientific teaching through so long a period. But Mr. Sands Cox had done more than this: he had founded and reared up the college in which they were assembled. He beheld before him and around him the fruit of his toil in an institution which bids fair to take a high place in the science and literature of this country, and even of Europe. He would descend to posterity in the class described by that great poet to whom reference had been made in the lecture,—"Quique sui memores alios fecere merendo." Besides this, they all knew the amiability of his private deportment; and this would supply them with another reason to join him in the expression of congratulation with which he would conclude,—"That the Warden, Professors, Tutors and Students, and other friends of the Queen's College, in Birmingham, beg leave warmly to congratulate Professor Sands Cox, F.R.S., on the commencement of his twenty-sixth year of medical instruction, and on the bright prospects and flourishing condition of the college and hospital which he has had the honour to found; assuring him, at the same time, that they are deeply sensible of his philanthropic labours in the cause of education and charity, and earnestly desirous of co-operating with him for the full realization of his enlarged and comprehensive views." The proposal was received with the most enthusiastic applause.

Illness of Mr. Vincent.—The numerous friends of this esteemed gentleman will learn with regret that he is seriously indisposed at his country residence. It is stated that he has resigned the appointment he has held for so many years at the Examining Board of the Royal College of Surgeons, of which institution he has been twice elected President.

District Lunatic Asylums, Ireland.—His Excellency the Lord-Lieutenant of Ireland has nominated Dr. Burton as resident physician and governor of Maryborough District Lunatic Asylum.

Mr. Levison, of Brighton, is delivering a course of lectures at the Royal Literary and Scientific Institution of that town, on the "Philosophy of Ghosts, explained on Physiological Data."

Mr. W. Mellor, of Wolverhampton, has left 2,000*l.* to the South Staffordshire General Dispensary, and 20*l.* to the dispensary at Aberystwith.

The Mechanical Leech, Kidston and Co., Manufacturers, 18, Bishopsgate-street, London.—This is an ingenious little instrument, well qualified, as its name imports, to supply the place of the ordinary leech when the practitioner does not require to take a large quantity of blood, or when it is desired to abstract blood in difficult situations. It is, withal, an elegant appliance. The apparatus consists of a scarificator, combining in one instrument the two offices of air-exhauster and scarificator, and acting, therefore, on the principle of the ordinary apparatus for cupping. After the incisions are made, a little air-pump or sucker, called by the inventor the "leech," is applied for the purpose of drawing blood. Seeing the difficulty medical men often experience, especially in rural districts, of procuring good leeches, or even leeches of any kind, we think this apparatus is likely to prove of great utility, and would recommend every practitioner to have one at hand as a ready resource upon emergencies.

HEALTH OF LONDON DURING THE WEEK.

In the week ending last Saturday, the deaths registered in the metropolitan districts were 839. Taking for comparison the ten weeks of 1840-9, it appears that the lowest number occurred in the corresponding week of 1845, and was 786; the highest in that of 1849, when it was 1075. The average of the ten weeks is 925, which, if augmented in the ratio of assumed increase of population, becomes 1009. This last number exhibits a high average mortality for autumn, and places the present state of the public health in an advantageous point of view. The deaths from the epidemic class of diseases were last week 207; in three previous years, (1847-9) taking the same week in each, the deaths from epidemics were respectively 327, 448, and 372. But it is an important fact to be observed, that the present decrease of mortality is almost entirely confined to the juvenile part of the population. In no corresponding week of the previous ten years have the deaths of young persons under fifteen years been so few as in last week; for the lowest number, which occurred in 1841, was 390, and the highest, which occurred in 1848, was 531.

It appears further, that, whilst the rate of mortality now prevailing, approaches the average amongst persons of middle age, it actually exceeds the average with sexagenarians and others at an advanced period of life. The diseases which attack the young—small-pox, measles, scarlatina, and hooping-cough—prevail much less fatally than usual. Fever, however, seems to increase. Last week it carried off 55 persons; in the previous week the number was only 36, and the average is about 40. Four of the cases now registered occurred in the London Fever Hospital. Diarrhœa and dysentery were fatal in 57 cases, which rather exceeds the average. Only one instance of cholera is mentioned.

MORTALITY TABLE.

Deaths in the week ending Saturday, Oct. 12, 1850.

(Metropolis.)

Causes of Death.	Oct. 12. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	365	279	187	829	9245
Specified Causes	364	279	187	830	9194
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	153	31	23	207	2464
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	4	23	27	54	518
Tubercular Diseases	46	98	7	151	1666
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	29	34	31	94	1026
Diseases of the Heart and Blood-vessels	2	17	14	33	280
Diseases of the Lungs, and of the other Organs of Respiration	43	18	24	85	1143
Diseases of the Stomach, Liver, and other Organs of Digestion	23	27	14	64	591
Diseases of the Kidneys, &c.	...	12	5	17	88
Childbirth, Diseases of the Uterus, &c.	...	6	...	6	114
Rheumatism, Diseases of the Bones, Joints, &c.	4	6	1	11	50
Diseases of the Skin, Cellular Tissue, &c.	2	...	...	2	8
Malformations	5	...	...	5	28
Premature Birth and Debility	27	1	...	28	218
Atrophy	16	...	1	17	184
Age	...	...	35	35	502
Sudden	4	1	...	5	93
Violence, Privation, Cold, and Intemperance	6	5	5	16	221
Causes not Specified	1	...	...	9	51

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Oct. 12, 1850.	Sum of Ten Weeks.
London...	1948369	839	9245
West	301189	123	1285
North	376568	152	1633
Central...	374199	131	1719
East	393067	196	2155
South	503346	237	2453

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	22	Heart	27	Phthisis.....	108
Bronchitis	30	Hooping-cough ...	17	Pneumonia	40
Cholera	1	Hydrocephalus ...	20	Scarlatina	26
Childbirth	2	Influenza	2	Small-pox	6
Convulsions	22	Liver	16	Stomach	6
Diarrhœa	49	Lungs.....	7	Teething	12
Dropsy	17	Measles	15	Typhus	55
Erysipelas	9	Paralysis	21	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	720	445	275
Females	649	394	255
Total.....	1369	839	530

METEOROLOGY OF THE WEEK.

Day.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	+ 0·5	29·488	52·2	45·4	S.S.W.	S. & S.E.	Miles. 250	0·10	Nothing was shown at any examination.
Monday	+ 3·2	29·350	54·6	41·0	S.W.	W.S.W.	305	0·00	Nothing was shown throughout the day.
Tuesday.....	+ 1·1	29·565	52·5	42·5	S.W.	S.W.	155	0·00	Nothing was shown throughout the day.
Wednesday.	— 3·2	29·800	48·2	44·5	S.W.	S.W.	70	0·00	Nothing was shown throughout the day.
Thursday ...	— 3·2	29·875	48·2	39·2	N.	N.W. & W.S.W.	150	0·00	Positive, and tension strong during the afternoon.
Friday	— 7·1	29·871	44·3	38·3	N.N.W.	N.N.W.	215	0·15	Negative, and very active at 1h. 10m. p.m. Sparks and galvanic currents were shown.
Saturday ...	— 6·1	30·212	45·2	36·9	N.N.W.	N.	105	0·00	Nothing was shown throughout the day.
Means ...	— 2·1	29·738	49·3	41·1	S.W. & N.N.W.		SUM 1250	SUM 0·31	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications have been received from—

Mr. Haynes Walton, of Grosvenor-street, "XVIth Lecture on Operative Ophthalmia," with woodcut.

Dr. d'Allex, of Lower Brook-street, on the "Preference to be given to the Physiological Position in the Treatment of Fractures of the Femur."

Mr. Ure, of Bloomsbury-square, "Case of Amputation of the Leg."

Dr. Venables, of Finsbury-circus, "Explanatory Observations for a more Speedy Collection and Adjustment of Urinary Sediments—Spontaneous and Artificial—for Microscopical Examination, and for their more prompt and immediate Diagnosis."

A Young Surgeon; Mr. T. W. Jones, of Eldon-place; J. P. C.; One about to Recommend a Patient to Insure his Life; Dr. Gibson, of Adelaide-road; H. L.; Mr. Hamilton, of Great George-street, Liverpool; N. M. S.; Mr. Davis, County Galway; C. L., of Bristol; Mr. S. Gibbon; Dr. Sheridan Muspratt; G. H. K.; C. S.; Mr. Allison, of Bridlington; Mr. David Wilson, of Brook-street; J. Chapman, M.D., of Grosvenor-street; Vigilantibus; Junior; Mr. Foss, of Stockton-upon-Tees.

[To the Editor of the Medical Times.]

Sir,—Having been informed by a medical friend that a report highly injurious to my character has been widely circulated, and by some believed, and which has been, I am led to suppose, the means of my unsuccessful canvass for one or two appointments lately, I beg most publicly to assert, that I am not now, nor have I ever been, connected, either directly or indirectly, with a notorious establishment either in Long-acre, Queen-street, or Maiden-lane; and also that I am not the person, though of the same name, who practises in a certain line in the vicinity of Euston-square. I have been much annoyed by persons calling with protested bills, &c.; but who, upon an interview, apologized, saying, I was not the person, though the only address in the Post-office Directory of a Dr. Gibson was Hawley-terrace, where I formerly resided.

Hoping you will kindly insert the above in your next number,

I am, Sir, &c.

Edward Gibson, M.D., Member of the Royal College of Surgeons, England.

Slaney House, Adelaide-road, Camden-town.

Medical Protection Office.

[To the Editor of the Medical Times.]

Sir,—In corroboration of your remarks on the letter of "Verax" in your last number, I beg to assure you that, so far from my attempting to quash the appointment of a Committee of Investigation, alluded to in his letter, I conceive that, as Chairman of the late meeting of the above Office, I could have had no such power. I do not know what authority the Chairman of a public meeting can have to annul a resolution which has been formally put and carried. It is true that some of the members, on finding they had been deceived as to the amount of cash in hand, refused to act, but the motion to form a Committee of Investigation was never withdrawn; and, therefore, I presume that those gentlemen who were appointed, and disposed to act, are still competent to do so.—I am, Sir, &c.

T. W. Jones.

Eldon-place, Kennington-lane, October 9, 1850.

A Constant Reader is a sad quiz and wicked wag. We have made inquiries: the reason assigned is, that the predecessor did not follow the rule—if rule it be;—it might therefore appear invidious to revive the practice. There can be no other cause that can influence one so liberal in character and independent in fortune as the present holder of office.

Medical and Chirurgical Society.

[To the Editor of the Medical Times.]

Sir,—There is a rule of the Society to which I wish particularly to call your attention—the admission of visiters. Some few years back a rule was made not to allow a visiter to be introduced oftener than three times in one session. I am sorry to say that during the late session this rule was frequently broken by many, especially by one gentleman—a physician—who I know is in a far better position to obtain an *independent* entrance from his own purse than many of the fellows, who would not stoop to so small a favour as being introduced by a friend.—I am, Sir, &c.

A Constant Reader.

A Young Surgeon.—1. The case, if concisely drawn up and authenticated by the writer's name, will be inserted. 2. That which is required may be obtained at our publishing office.

Mr. Hamilton, of Liverpool, will be written to.

Dr. Morris, of Spalding.—We regret we have hitherto omitted to acknowledge the receipt of Dr. Morris's communication—an inadvertence for which we have made the only *amende* in our power.

Mr. Davis is assured that the circumstance of which he so justly complains is a source of infinite annoyance to ourselves. We have done our best, and can do no more. The fault is not ours, but the author's, who does not send his MS. for completion.

The engravings for Professor Fergusson's (of King's College) "Case of Harelip, reported by Mr. Henry Smith," are ready, and will be published as soon as our many engagements will permit. Our "Original Communication box," thanks to our many friends, is in a state of great repletion.

C. L., Bristol, will find the articles in question by referring to the Index of our last volume. We propose to renew and complete the subject in a few weeks. Mr. Renshaw, of the Strand, has published a work on the Parisian hospitals, by Mr. Wiblin, of Southampton.

Mr. S. Gibbons will be written to.

Dr. Venables' valuable communication will be published as soon as possible. His request will be readily complied with.

Dr. Sheridan Muspratt's communication has been some time in type, and will appear in our next Number.

C. S.—We understand that the forthcoming edition of Mr. Acton's work, (Renshaw publisher,) will contain a chapter on the subject of "C. S.'s" inquiry.

Mr. Allison, of Bridlington.—The Guy's Hospital Reports will be reviewed in due course in our journal, and doubtless the views of Mr. Wharton Jones will be laid before the profession.

[To the Editor of the Medical Times.]

Sir,—Will you be so kind as to inform me, through the medium of your excellent publication, whether a medical man is legally bound to give evidence before a coroner and his court, without having first received the fee allowed by law for so doing? My reason for asking the question is this, I have so much difficulty in procuring the fees afterwards, that I am determined not to give evidence without receiving them first, if I can help it.

The coroner receives the medical fees after each quarter sessions, yet I have to wait a year or two before I can procure them, even by much dunning, so that the trouble of getting the fees is more than they are worth.

I am, Sir, &c., H. L.

The law as it now stands is—

"1st. To every legally-qualified Practitioner, for attending to give evidence under the provisions of this Act, at any coroner's inquest whereat no *post-mortem* examination has been made by such Practitioner, the fee or remuneration shall be one guinea.

"2nd. For the making of a *post-mortem* examination of the body of the deceased, either with or without an analysis of the contents of the stomach or intestines, and for attending to give evidence thereon, the fee or remuneration shall be two guineas."

It is, however, necessary to remind our Correspondent of the dictum laid down by the Judge of the Westminster County Court, in the case of "Lord *v.* Wakley," viz., that a witness cannot recover without having been served with a written formal order to attend the inquest, in legal verbal accordance with the Act of Parliament, and this, even though the witness's attendance was requested through a messenger direct from the Coroner's Court.

Vigilantibus will perhaps favour us with his name.

J. P. C.—We have applied for the information our Correspondent requires on the Saline Treatment of Cholera, and hope to obtain it for him by our next Number.

We have a letter in type from Chemicus, "On Dr. Scoffern's Process for Refining Sugar."

Since Mr. Wilson's letter, and our note in reply, were in type, we have received from Dr. Chapman a communication conceived in a more gentlemanlike spirit than was the letter to which we have alluded. We may, therefore, next week lay it before our readers. Dr. Chapman states he is a Member of the College of Surgeons, and formerly practised in Liverpool.

ORIGINAL LECTURES.

LECTURES
ON
BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE VIII.

The Special Pathology of Tuberculosis continued.—The Albuminous form of Infiltration.—The Phases of Tuberculous Development.—The destructive tendency of Tubercle.—Softening.—The more complete Liquefaction of Tubercle and Ulceration of the neighbouring Parts.—Encysted Tubercles.—The curative Tendency of Tubercles.—Absorption.—Obsolescence and Cornification.—The Cretaceous Transformation.—The Cicatrization of Tuberculous Ulcers.—The Chemistry of Tubercle.—Microscopical Chemistry.—Analyses of Crude Tubercle.—Elementary Analyses by Scherer.—Proximate Analyses by Thenard, Scherer, Preuss, J. F. Simon, &c. &c.—Analyses of Softened Tubercle.—Analyses of Cretaceous Tubercle.—Summary.—The Non-vascularity of Tubercle.—The Degree of Organization exhibited in Tubercle.

In describing tubercle, the special anatomical element of tuberculosis, we have already had under consideration,—1. The seat of tubercle. 2. The origin and primary development of tubercle. 3. The consistence of tubercle. 4. The external configuration or form of tuberculous matter. I had in part described, 5. The classification of tubercles, and the relation which subsists between the grey and yellow varieties. There remain to be considered, 6. The phases of tuberculous development; and, 7. The chemistry of tubercle.

Besides the varieties already described of *grey granulation* and *crude yellow tubercle*, and the formal variety denominated *tuberculous infiltration*, which may be *grey* or *yellow*, tubercle presents itself as another variety—the *gelatiniform infiltration* of Laennec or *albuminous* tubercle of Rokitanski. Although for a long time it was believed that these varieties occur in the lungs only, some of the highest authorities now admit that they are met with in nearly all the organs. Both grey and yellow tubercle have been observed repeatedly in the serous membranes of the chest, abdomen, and brain: in the mucous membranes; in the glands, the liver, spleen, and kidneys; and in the bones. The history of tubercle is essentially the same in whatever part of the body it may present itself.

The Gelatiniform Infiltration or Albuminous Tubercle.—This is a very humid, colourless, or reddish form of tuberculous matter, usually infiltrated to a small extent in the intervals of miliary tubercles. Laennec was of opinion, that by degrees it is transformed into the grey granulation, and I have already stated, that according to the views of this eminent pathologist, the latter ultimately becomes crude yellow tubercle. Laennec remarks, that where this jelly-like matter is most transparent and fluid, small yellow points are frequently observed in it, consisting evidently of crude tubercle; and that the conversion of this as well as the grey granulation into yellow tubercle is sometimes so rapid that their traces cannot be detected, although there can be no doubt that the one originated in the other. Other pathologists have denied that this matter is tubercle, considering it a simple product of inflammation. Rokitanski regards this albuminous affection as being always indicative of a curative tendency.

THE PHASES OF TUBERCULAR DEVELOPMENT.

Although tubercle deposited from the diseased blood in tuberculosis, and aggregated in particular organs or tissues, undergoes changes, and produces effects dependent, in some measure, upon the nature of the tissue or the function of the organ in which it is deposited, and also upon the particular exciting cause of the deposition, whether occurring spontaneously or induced by congestion, inflammation, the rupture of a vessel, or the like, there are, as already intimated, certain changes to which the tubercle is subject, under whatever circumstances, or wherever deposited; and these changes have received a great share of attention from pathologists.

In some structures, and particularly in the lungs, tubercle may present a vesicular appearance from the very commencement of its existence, but this is attributable to the fine tissue under which it is deposited. As already described, for the most part it begins by a semi-opaque point, which soon becomes wholly opaque. The morbid deposit may remain latent for a longer or shorter time (from a few weeks to many years) in this primitive semi-opaque, or secondary wholly opaque state. Tubercles have been met with in subjects of all ages, who have never given any evidence of them during life; at the same time, it is necessary to be extremely cautious in admitting its existence in this state without evidence, as I have no doubt it has frequently been erroneously assumed, to account for symptoms which in truth depended, not upon local but upon general disease. Tubercle remaining for any length of time in a latent state depends in a great measure upon the condition of the blood, whether it be more or less tuberculous; or whether, from hygienic causes and more perfect hæmatosis, it may have lost its tuberculous condition. It depends, also, upon the state of the surrounding tissues—whether, for instance, they are in a perfectly quiescent, or in an inflammatory state, or subjected to, or exempted from, the causes of congestion or irritation. In most cases where tuberculous points are scattered over the pleura or peritoneum, the serous membrane continues transparent up to these points, and only becomes reddened or opaque when the tubercle has begun to act as an irritant, or to undergo some new phase in its development.

Previous to the commencement of the changes about to be described, an increase of bulk takes place. From the size of a pin's head, a tuberculous mass may acquire the bulk of an ordinary orange. When the rapid aggregation of tubercle has once commenced, the process, for the most part, continues, the morbid blastema continually secreted from the blood furnishing particle by particle. In some cases the mass has a tendency to isolate itself by degrees, and a cyst becomes organised around it, just as happens in the formation of a pyogenic membrane in a common abscess. The existence of tubercles is in general first declared when they begin to disturb the function of an organ by their size or number, or when some degree of inflammation is excited; but whenever it is deposited, and has become aggregated into distinct tubercles or masses, as heretofore described, it is liable to undergo particular changes in its nature and qualities, and to produce certain effects in the surrounding tissues. These changes are well distinguished by Lebert as having either a destructive or a curative tendency.

(a) THE DESTRUCTIVE TENDENCY OF TUBERCLE.

This is towards softening and ulceration, which is lamentably the most common result.

1. *Softening.*—much discussion has taken place among morbid anatomists as to the mode in which softening occurs. Laennec and many of his successors affirmed that it commenced in the centre of the tuberculous mass. Andral, Carswell, and the greater number of the more modern writers, describe it as commencing at the periphery, and attribute it to the action of pus and other fluids derived from the surrounding tissues. Those who adopt the latter view exclusively, have given various explanations of the central softening which unquestionably is sometimes observed. Lebert reconciles the whole of these discrepancies by describing four different forms of softening:—

1. Miliary or very small tubercles soften in the centre, without any inflammation of the surrounding parts in the immediate neighbourhood. Softening then occurs without admixture of pus. This form is met with in the lungs, the brain, and the submucous cellular tissue of the intestines. On examining tubercles in this state, caseous granules may be perceived interspersed in a liquid, which are nothing more than the less softened particles where the intermediate granular mass has not at present become liquid.

2. The softening is accompanied by much less complete liquefaction. The tubercle generally becomes friable and granular, this being sometimes only the commencement of liquefaction; at others the tubercle remains for a long period in this state of semi-softening, or passes even into the state presently to be described as cretification. Lebert has observed this more particularly in the cervical and bronchial

glands and in the brain. It is much more rarely found in the lungs.

3. There is central softening and peripheral suppuration. During the softening, inflammatory action sets up in the tissues surrounding the tubercle, which terminates in suppuration. The microscope shows the difference of these two conditions. Disaggregated tubercle corpuscles, unalterable by acetic acid, are found in the centre; in the fluid of the circumference, besides these, pus globules are found, the envelope of which may be dissolved in acetic acid, disclosing a nucleus. This state is sometimes found in the glands, but more frequently in the lungs, in which the pus is also sometimes derived from the eroded bronchial capillaries.

4. There may exist an indistinct mixture of the elements of pus and softened tubercle, and then no limits are to be observed between the two products. This is particularly the case in the softening of tuberculous infiltration, as it occurs extensively in the lungs and glands and more rarely in the subserous cellular tissue.

Rokitanski thus more particularly describes the usual process of softening;—"After the tubercle has existed for some time in a state of crudity, it becomes, as it were, loosened in its texture, and usually increases in volume; it breaks up on slight pressure, and becomes more moist; then changes into a yellowish, dissolving, casein-like, fatty, and viscid matter, and finally breaks up into a thin, whey-like, acid fluid, in which flocks and shreds—the remains of the imperfectly disintegrated tubercle—are observed swimming." * * * "The softening consists in the solution and disintegration of the solid groundwork of the tubercle into a fluid containing an abundance of the minutest molecules. This change is followed by a separation and isolation of the histological elements of tubercle, which undergo more or less marked alterations by their immersion in the fluid; the cells become distended, corroded, and are finally dissolved; the nuclei shrivel, and assume irregular forms, becoming angular and indented. Finally, in softened tubercle we meet with free fat."(a)

Thus the softening of tubercle, at least in its early stage, is, for the most part, a mechanical process. I say, "for the most part," because, if imperfect organic cells be admitted as an essential constituent, it is difficult to exclude the possibility of some degree of vital molecular action. Inflammatory action is clearly not the primary cause of this softening, although it undoubtedly accelerates the process whenever it occurs. From extensive series of observations in man and animals, Rayer and others record, that the central softening of tubercles never presents pus globules, showing, with other evidence, that it cannot be imputed to inflammation. The peripheral softening, on the contrary, is almost always mixed with pus globules, showing that it is generally attended by inflammation—not of the tubercle, but of the surrounding tissues. The equilibrium between deposition and absorption, in the ultimate structure of an organ, being disturbed, and tubercle being deposited and aggregated as a non-vascular and foreign material, commencing in a point and augmenting mechanically in volume, being in an early stage solid, and thereby excluding the access of air, decomposition is for a certain time resisted. But, at the same time, located in an organism in which a certain temperature is maintained, and a great mass of liquid is in perpetual circulation, it must sooner or later, by the ordinary and universal laws of imbibition, become decomposed. The central part, or that which has been longest deposited, is the first to become altered, and the change propagates itself by centrifugal extension to the molecules more recently formed. Inflammation, although not the primary cause, tends very greatly to accelerate the process.

It has been well observed by Mr. Rainey, in an excellent article on the formation of pulmonary tubercle, (b) that, as a tubercle increases in size, the central parts become further and further removed from those vessels by which the tuberculous matter was in the first instance deposited, and, consequently, these parts will have the greatest tendency to lose their vegetable or cell life, and become softened; the process accordingly beginning in general, if not always, in the centre of a tubercle:—"But it must be recollected, that the geometrical centre of the mass is not necessarily the point furthest removed from the source of circulation; the point may even be on the side of the tubercle, provided (in the lungs) it be the remote cells of a lobule which are occupied by the tuberculous matter, namely, those bounded by an interlobular fissure; in such a case, this part of the tubercle might be further removed from the source of circulation than the centre."

2. *The more complete Liquefaction of Tubercles and Ulceration of the Neighbouring Parts.*—Lebert observes that, in the process of softening, the tuberculous corpuscles maintain their integrity, although they become distended, which is the commencement of their disintegration. In liquefaction, the corpuscles gradually lose their individual characters, and terminate by resolving into a fluid which has no characteristic molecules. The surrounding parts, also, alter by degrees, both by the addition of fresh tubercular deposit and by the occurrence of inflammatory action. Previous to this, according to Lebert and most other pathologists, the tissues around the tubercle, under ordinary circumstances, are quite free from any inflammatory appearance. Mr. Rainey gives an interesting demonstration of this: he states, that the perfectly natural appearance of the vessels close to a tubercle, and even of the air-cells containing a small quantity of tubercular matter not sufficient to have impeded their circulation in the capillaries during life, when compared with the tortuous and unequally dilated state of vessels going to air-cells filled with fibrine in consequence of inflammation, are pathological considerations in favour of the non-inflammatory nature of tubercle, and also tend to show that the obliteration of the capillaries is produced by a force which has exerted on them a slow and gradual compression, such as can only be conceived to have been produced by the accumulation of tuberculous matter in contiguous cells pressing upon the intervening plexuses. (a) When, however, the surrounding parts thus become affected, the ulcerous tendency of tuberculosis prevails, and ulceration is the rapid result. In some parts tubercles rarely arrive at the stage of complete liquefaction, as in the nervous centre and their envelopes, the peritoneum, mesenteric glands, pleura, spleen, and other organs. On the contrary, the liquefaction and ulceration occur constantly in the lungs, where the ulcers assume the form and are known by the name of vomicæ or caverns, as also in the cervical and axillary glands, where they become scrofulous ulcers, and in the intestines, bones, and sometimes in the liver and kidneys.

Rokitanski's account of dissolved tubercle corresponds very closely with that given from Lebert; he states that it consists—*a*, of a fluid with minute molecules; *b*, of altered and isolated nuclei and cells; *c*, of free fat, in the form of eliminating granules, and distinct globules of a larger size.

To complete the history of local tuberculous development we should have to describe, not only the aggregation of tubercles, their softening and liquefaction, and the inflammation and ulceration of the adjoining tissues, but the formation of fistulæ and sinuses frequently established in the neck, over the sternum, or in the abdomen, and proceeding from tuberculous deposits in the bones, glands, lungs, or peritoneum; but in doing so we should enter too much in this place into the consideration of the local varieties of tuberculosis. All these affections in tuberculous subjects have one important pathological relation,—they all derive their special characters from the particular disease of the blood. In all, tubercle is first deposited in a crude state, and then softened.(b) The surrounding parts then become inflamed and infiltrated with pus, the tubercle is liquefied and dissolved, and the inflammation proceeds gradually to the external surface. In this way tubercles of the lymphatic glands open upon the skin; intestinal tuberculous ulcers on the free surface of the intestines; pulmonary ulcers in the bronchiæ; and not only are the contents thus discharged externally, but an habitual secretion of tuberculous pus from the morbid blood, with the tuberculous qualities described in a former lecture, is established in the parietes of the ulcer, fistula, or sinus.

In exemplification of the fact, that these processes vary, to a certain extent, according to the tissue and organ in which they occur, I quote the following interesting illustrations also from Lebert, but which one's own experience amply confirms. The destruction resulting from the liquefaction of tubercle is most complete in the lungs, and the tuberculous matter is either discharged in molecules or in small masses

(a) *British and Foreign Review*, Jan. 1848. p. 174.
(b) "Med. Chir. Transac.," Vol. XXVIII., p. 591.

(a) Lib. Cit., p. 594.
(b) Lebert Lib. Cit., p. 17.

of softened substance. In the external lymphatic glands more voluminous grumous masses are sometimes discharged, and Lebert once met with an entire tubercle, having the form and volume of a large bean, expelled through a fistula in the neck which he had laid bare. In intestinal ulcers the liquefaction is less extensive, and a very small secretion of pus takes place, but rather an increase of epithelial desquamation and of all the intestinal secretions. The peritoneal surface is particularly exempt from suppuration. In the superficial lymphatic glands pus forms in large quantities, and frequently in similar quantity in pulmonary caverns.

3. *Eneysted Tubercles.*—Tubercles are sometimes enclosed, like a kernel, in a capsule or cyst of greater or less density. This has been particularly observed in the bronchial glands. These cysts are sometimes semi-cartilaginous, and are perceptible before the softening of the tubercles. They adhere to the surrounding parenchyma firmly. Before the tuberculous matter becomes softened, it adheres to the cyst, and on removing it the interior surface is rugged, but polished. When the process of softening takes place, the cavities are described as being lined with a false membrane of effused fibrine, proceeding from a delicate vascular network, and this appears to be the commencement of that process of cicatrisation which we shall presently have to describe. For the most part, however, as in the lungs, the mere parenchyma forms the walls or boundary of the excavation or vomica.

(b) THE CURATIVE TENDENCY OF TUBERCLE.

1. *Absorption while in a Crude State.*—The possibility of this has been denied without much reason; the rarity of the occurrence is certain. Andral, Carswell, Hasse, and other high authorities believe in it. Demonstrative evidence has been afforded that the material of tubercle is, at all events, partially absorbed in all its phases of development, and in most situations in the body. The animal matter and the liquid is sometimes absorbed, leaving the earthy matter behind. That absorption occurs, is also shown by the fact that a tuberculous cavity in the lungs is almost always surrounded by crude tubercles; but, when the remains of a cavity are found in a portion of lung, scarcely a vestige of surrounding tubercle is to be seen. The inference is, that the surrounding tubercles are more likely to have been absorbed than expectorated.

2. *Obsolescense and Cornification.*—Rokitanski affirms that grey granulation is capable of one metamorphosis only. After it has passed through its condition of crudity, it loses its shining appearance, and increases in density, becoming converted into a small hard lump, and then shrivelling into a tough amorphous or slightly fibrous horny mass. This forms the basis of the complete destruction of the tubercle, and no further change can take place; the process is sometimes accompanied with more or less of ossification, in which case the remains of the tubercle consist partly of a horny mass, and partly of bone-earth. Grey granulation, according to this morbid anatomist, never undergoes softening; whenever this process occurs, there is always an admixture of yellow tubercle. So far as the tubercle is concerned, this may be regarded as a curative tendency, and, if its expulsion, or its remaining quiescent in the tissues, could be ensured, it would prove so, but unfortunately it exists for the most part as a foreign material, exciting the blood and tissues to further pathological changes. This change may occur, either in the granular or the infiltrated form of grey tubercle; if it take place in all the tuberculous matter deposited, the disease of the blood being at the same time arrested, the cure of the tuberculosis is complete, and, if the grey granulation be admitted as the earliest stage of local tuberculous disease, this is one form of natural cure.

3. *The Cretaceous Transformation.*—Cretaceous concretions are admitted to be the remains of degenerated tubercle, although, as remarked by Dr. Blakiston, neither these nor fibrous nodules ought to be set down as invariable evidence of the pre-existence of this morbid deposit. The formation of these concretions has been traced through all its stages, from crude tubercles to masses of a stony hardness. The first stage of the process, according to Lebert, appears to be an increase of density in the tuberculous mass. It becomes less cohesive and harder, losing its yellow and assuming a whiter tint. In the second stage it assumes a plaster-like appearance, resembling lime broken down with a small quantity of water, and is of a milky whiteness, unless mixed with some foreign material, as with melanotic matter in the lungs, or in the bronchial glands. In the early stage, under the microscope, the interglobular material is preserved, but an increased proportion of saline and mineral granules are observed. By degrees, the amorphous stroma diminishes, and becomes completely replaced with the mineral particles, *which are sometimes deposited even in the interior of the tubercle corpuscle.* At the same time, the fatty matter is liable to increase, and groups of cholesterine crystals appear, which are much more frequent in cretaceous than in crude or softened tubercles.

The following is another account of the cretaceous transformation. Inflammatory plastic effusion, free from all tuberculous taint, takes place, in the first instance, in the adjacent parts. On the subsidence of the inflammation, the textures shrivel. This occurs in the lungs in a degree proportionate to the obliteration of the bronchial tubes. Ultimately, the tuberculous mass becomes surrounded simply with a thin isolating crust, and the absorption of the fluid parts of the tubercle gradually ensues, leaving at first a dryish pap-like residue; the organic elements of the tubercle appearing to be taken up by the system, and phosphate and carbonate of lime progressively deposited in their stead. Thus the original volume of the entire mass diminishes more or less rapidly; and a considerable portion of the adjoining structure, as of the lungs, is at times reduced, by obliteration and shrivelling, to a hard shell, holding in its centre a chalky tubercle no larger than a pea. This healing process is said to be by no means unfrequent; its traces are found in very aged, and occasionally in younger individuals.

Cretaceous tubercles are of extremely frequent occurrence. The continental pathologists affirm that they are met with mostly in subjects who have been cured of old pulmonary affections of limited extent, in whom death has been produced by some other disease. They are found, also, in the subjects of extensive pulmonary disease terminating fatally; but, as remarked by Lebert, this does not invalidate their curative tendency. It shows a disposition to cure in certain parts; but the disease of the blood may continue its ravages in other parts, just as intestinal ulcers are sometimes found cicatrized in the autopsy of individuals who die of typhus, in whom there are many other ulcers not cicatrized. Cretaceous tubercles are found, especially in the lungs and bronchial glands, occasionally in the mesenteric glands, and even in the glands of the neck. Their connexion with tuberculosis, and in particular with tuberculosis pulmonalis, has been long known. Cullen refers to cases in his own experience of calcareous concretions coughed up frequently with a little blood; sometimes with mucus only, sometimes with pus. In two cases, the symptoms of "phthisis" were never fully formed, and the patient entirely recovered.(a)

4. *The Cicatrization of Tuberculous Ulcers.*—Many observers, as for instance Albers, deny the possibility of the cicatrization of tuberculous cavities. They ascribe the cicatrices which have been so frequently found in the lungs to the obliteration of pulmonic non-tubercular abscesses; and the main argument employed is the infrequency with which tubercles are found in the vicinity of such cicatrices, either in the lungs or other organs. But we have admitted another explanation of this unfrequency, viz., their absorption.

Rokitanski states, if I clearly understand his views, that, when tubercles tend towards cicatrization, the progress of the disease is slow, and a more healthy inflammation is set up around the tuberculous mass or cavity. The result of this is a deposit of the gelatiniform tuberculous matter, which closes, and ultimately produces a wasting of the air-cells. This may form a persistent layer, and it may gradually become more albuminous or fibrinous, or it may be thrown off and replaced by tubercle, as the state of the patient's blood may happen to be more or less tuberculous, and as the disease tends towards cure or not,—this albuminous deposit being always indicative of a curative process, and sometimes proceeding to a complete cure.

The occurrence of cicatrization in tuberculous ulcers, even after they have committed great ravages, is now received by such high and competent authority,—Laennec, Louis, Andral, Carswell, Lebert, &c.,—that it can no longer be doubted. The tuberculous ulceration of the lymphatic glands heals. It is uncertain whether these ulcers cicatrize in the intestines,—Louis does not mention such a fact. Tuberculous caverns in the lungs occasionally heal. The mode in which healing takes place, making some allowance for

(a) First Lines. Vol. IV. p. 423.

difference of structure, is essentially the same in all. 1. There is a cessation of the deposition of tubercle in the neighbourhood of the ulcer. 2. The formation of a fibro-cellular membrane, which closes the ulcer. This membrane is at first very vascular, but becomes gradually less so, and ultimately contains no vessels at all (Lebert). 3. The membrane becomes transformed into a fibrinous production, with a more or less abundant fibrinous deposition on its surface and in its neighbourhood. 4. This structure follows the ordinary law of such tissues; that is to say, by the efflux of time, it gradually diminishes in volume, which gives it particular characters, as a contracted and puckered aspect, which is observed both in the neck and the lungs.

According to the tissue in which tuberculous ulcers thus cicatrize, different circumstances occur. In the lungs, the membrane gradually thickens, most probably from behind, rather than from plastic effusion on its free surface; it is assimilated to the organism by replacing the pre-existing tuberculo-purulent false membrane. The cavity contracts, and the membrane grows, as it were, towards the centre, until it is completely filled with a cellulo-fibrinous substance like brawn, or the remaining cavity may remain open, simply losing the character of the original disease. The minute circumstances attending these processes can only be properly considered when treating of the individual varieties of tuberculous disease.

THE CHEMISTRY OF TUBERCLE.

1. *Microscopical Chemistry of Tubercle.* — The microchemistry of animal products, and of tubercle in particular, has been very superficially attended to at present, and practical and scientific medicine has derived but a very small share of those advantages which are to be expected from its cultivation. As respects tubercle, all that can be said is, that its component cells or corpuscles have peculiar microchemical reactions, differing essentially from those of pus globules; with acetic acid, for instance, the latter become quite transparent, and develope a nucleus; whereas tubercle corpuscles become only a little more transparent than before, and do not develope any nucleus (Lebert.) Tubercle cells differ also from fat globules in not being altered by alcohol and ether. They are dissolved by solutions of caustic potassa and by hydrochloric, nitric, and sulphuric acids, and by ammonia, which renders them more transparent, and the granular matter becomes more visible.

2. *Chemical Analysis of Tubercle.*—The analysis of the pathological products of tuberculosis is also, at present, very imperfect. The semi-transparent grey granulation does not appear to have been separately examined, nor have the contents or the walls of pulmonary caverns in their different stages, nor tuberculous cicatrices. A knowledge of the composition of the whole of these is essential to a complete state of chemical pathology of tuberculosis. The facts of science are nearly limited to the analysis of tubercle, using the word in a general sense, but applying more particularly to yellow tubercle in its ordinary crude, softened, and cretaceous states.

(a) THE RESULTS OF THE ANALYSIS OF CRUDE TUBERCLE.

(*a*) *Elementary Analyses.* — Some very interesting facts have been determined by Scherer relating to the ultimate composition of tubercle. On analysis of the crude tuberculous matter of pulmonary tubercle, after the most careful removal of foreign constituents, the tubercle yielding little fat or extractive, and thereby appearing to show that it was of recent formation, the following ultimate elements were obtained:—

Carbon	53·888	= 100
Hydrogen	7·112	
Nitrogen	17·237	
Oxygen	21·767	

This corresponds with the formula C_{48} H_{35} N_6 O_{13}; and hence, comparing it with Liebig's formula for protein, (C_{48} H_{36} N_6 O_{14},) it may be regarded as protein, from which five atoms of carbon, one of hydrogen, and one of oxygen have been removed.(a)

By comparative analyses, Scherer has also shown that a remarkably close correspondence exists in the ultimate composition of tubercle from whatever part of the body it is derived, hydrogen being the most variable element.

The crude animal matter of a scrofulous mass from the abdomen of a child who died from general tuberculosis, yielded, on ultimate analysis, after extraction with water, alcohol, and ether:—

C_{46} H_{38} N_6 O_{12}

Hence, in this case, the isolated, crude, scrofulous, or tuberculous matter may be hypothetically regarded as formed from protein by the removal of two atoms of carbon and two of oxygen, and the addition of two atoms of hydrogen; or, by making the carbon the standard, we have

1 atom of crude animal matter (tubercle ?) of a scrofulous mass . . . . . = Pr. + HO + 2H(a)

The following table exhibits the results of Scherer's analyses in juxta-position:—

Tubercle from the lung . .	C_{48}	H_{35}	N_6	O_{13}
„ „ liver . .	C_{45}	H_{36}	N_6	O_{13}
„ „ peritoneum	C_{46}	H_{36}	N_6	O_{13}
„ „ brain . .	C_{46}	H_{37}	N_6	O_{13}
„ „ mesentery .	C_{46}	H_{38}	N_6	O_{12}

If we suppose protein to be the basis of tubercle, and proceed upon Liebig's formula, C_{48}, &c. The following are hypothetical formulæ, which the above results afford for the several varieties of crude tubercle:—

2 Atoms of tuberculous matter from the lungs = 2 Pr. + NH^3 + 2 HO + H.
2 Atoms of tuberculous matter from the liver = 2 Pr. + NH_3 + H.
2 Atoms of tuberculous matter from the peritoneum = 2 Pr. + NH_3.
4 Atoms of cerebral tubercle = 4 Pr. + NH^3 + 4 HO + 3 H.

We have also the following elementary analyses of tubercle by Dr. Glover:—

—	Carbon.	Hydrogen.	Nitrogen.	Oxygen.	—
Crude completely degenerate tubercle from the mesentery of a phthisical subject ...	54·97	6·63	12·31	26.09	=100
Crude mesenteric tubercle from a phthisical subject	56·40	.....	15·56	.....	
Crude lung tubercle	53·43	6·64	14·02	25 91	=100
Organised lymph from the pleura of a phthisical subject	57·18	.....	15·05	.....	
Ditto from the liver of a tuberculous subject by Scherer.....	55·19	7·186	16·602	21·022	=100

There is a remarkable correspondence in Scherer's results, and I am disposed to think them highly important; but, in the present state of science, it is very difficult to determine whether the radical defect consists in an excess of nitrogenous and hydrogenous particles, or a deficiency of carbonaceous materials. There is a want, also, of elementary analyses of tuberculous blood; and we are unable to say whether any modification of the elementary constitution of the blood corresponding with the tuberculous modification of its products, does or does not exist; all we can at present affirm is, that from the proximate analyses of the blood in incipient phthisis and scrofula, and from *à priori* reasoning, it is fair to presume that such a modification would be detected by accurate experiments. The results of these elementary analyses must not be overlooked in treating of the essential nature or the theory of the disease.

(*b*) *Proximate Analysis.*—Thenard was the first person who attempted the proximate analysis of crude tubercle; his experiments were performed in the infancy of organic chemistry; and the following are his quantitative results:—

Animal matter	98·15
Muriate of soda, Phosphate of lime, Carbonate of lime	1·85
Iron	traces
	100·0

Since Thenard's time organic analysis has greatly advanced, and numerous experiments on tubercle have been made by different chemists according to the most improved methods.

(a) Simon's Chemistry, Sydenham Edition, by Dr. Davy, p. 479.

(a) Idem, 4 1.

Scherer has given one of the best analyses of a mass of tubercle deposited in the liver. It was composed of round, irregular nucleated cells, larger than pus corpuscles, and numerous interspersed granules. He separated the fatty matter, water extract, alcoholic extract, and salts; and the crude tuberculous matter is to be understood as having the elementary constitution given above. The following are the properties of the constituent parts :—

Water		826·04
Solid residue :—		
Fat taken up by ether, consisting of olein and margarin . .	18·63	
Alcohol extract	21·75	
Water extract, with very slight traces of pyine	8·34	
Fixed salts	4·90	
Crude tuberculous matter . .	120·34	
	———	173·96
		1000·00

In tubercle from the horse, J. F. Simon detected the following constituents :—The tuberculous matter was deposited in masses from the size of a nut to that of a pigeon's egg; it varied from a yellow to a flesh colour, and its consistence was such as to admit of its ready division by the knife. Internally it was green and resembled coagulated casein.

Water	84·27
Fat containing cholesterine . .	1·40
Spirit Ext., with salts . . .	1·52
Caseous matter of Preuss . . .	1.14
Water extract and salts . . .	3·80
Insoluble constituents . . .	4.44

The most complete chemical analysis of crude tuberculous pulmonary substance which I have met with is made by Preuss, and quoted by several of the recent writers; in order to exhibit it in the clearest point of view to the reader, I have calculated it in the proportions of a thousand parts :—

Water		799·50
Residue of the pulmonary tissue composed of		
Gelatine obtained by boiling . . .	13·497	
Substances furnishing no more gelatine .	49·106	
Fatty matter	2·697	
	———	65·30
Tuberculous matter containing—		
A. Substances soluble in boiling alcohol—		
1. Cholesterine	6·685	
B. Substances soluble in cold alcohol and in water—		
2. Oleate of soda	18·269	
3. Chloride of sodium .		
4. Lactate of soda . .		
5. Sulphate of soda . .	. . . .	11·448
6. An indeterminate substance		
C. Substances soluble in water and not in alcohol—		
7. Casein . .		
8. Chloride of sodium		
9. Sulphate of soda .	. . . .	10·690
10. Phosphate of soda		
D. Substances insoluble in water and in alcohol—		
11. Casein altered by the heat		
12. Oxide of iron . .		
13. Phosphate of lime . .		
14. Carbonate of lime . .	. . .	88·108
15. Magnesia . . .		
16. Soda		
	———	135·20
		1000·00

Other proximate analyses of tubercle are extant too numerous to be inserted, and the opinions of the best organic chemists respecting the composition of this morbid production have varied greatly. Langlois and Hucnefeld regard it as consisting essentially of fibrine; Prout as incipient albumen; Gendrin as a mixture of albumen and salts. What Preuss and some other chemists have set down as casein, Glover and others have regarded as pyine; according to Mulder a tritoxide of protein. That we may have the results as fully displayed as our limits will allow, for future reference I insert the following abstract :—

There was found by—

Lassaigne.—In *tubercles from the lungs of a horse :* animal matter, 40 parts; subphosphate of lime, 35; carbonate of lime, 9; salts soluble in water, 16=100. In *tubercles from the liver of a horse :* animal matter, 50; subphosphate of lime, 45; carbonate of lime, 4; salts soluble in water, 1=100.

Hecht.—In *crude tubercle :* Fibrine, 30 parts; albumen, 23; gelatine, 27; water and loss, 27=107.

F. Boudet.—In *tubercle :* Casein, gelatine, and a considerable quantity of cholesterine. Treated with cold water, it yielded albumen, a substance resembling casein, and a fibrinous residue; with alcohol, oleic and margaric acid, lactic acid, neutral fat, cerebric acid, cholesterine, lactate of soda, and extractives. The ash of crude tubercle furnished products analagous to the calcareous concretions in the lungs and bronchial glands, viz., phosphate of lime, carbonate of lime in small quantity, carbonate and sulphate of soda, iron and silica. This latter statement, if to be depended upon, is highly important.

Guterbock.—In *tubercle from the bronchial and jugular glands :* A substance peculiar to tubercle, which has not been verified by other chemists; pyine, also phymatine, albumen, and fat.

Scharlau.—Albumen, gelatine, fibrine, fat, water.

Vogel.—Besides combinations of protein (fibrine, albumen, and casein,) fat, extractives, a material analagous to pyine and various salts.

Dr. Glover.—In *mesenterie tubercle :* Pyine, muco-extractive, and a peculiar extract. In another specimen: Fats, extractive matter, chlorides, phosphates, alkaline salts; protein residue 20 per cent. In *pulmonary tubercle :* pyine, albumen, (but no casein,) fats, and extractives. In *fresh tuberculated bronchial glands :* Fat, acids, cholesterine, extractives, insoluble protein, salts.

(b) RESULTS OF THE ANALYSIS OF SOFTENED TUBERCLE.

The chemical changes in the process of softening are at present but very little understood. L'Heretier found softened tubercle composed of albumen, very soft fibrine, fatty matter, and carbonate of lime. Boudet affirms, that the tuberculous material becomes alkaline, and soluble in the alkali developed. Lehmann appears to have ascertained that the combinations of protein (albumen, fibrine, and casein) gradually lose their sulphur and phosphorus, which totally disappear. Several authorities affirm, that, as softening progresses, the tubercle contains more and more fatty matter.

Mr. Wood found the following constituents in softened tubercle :—

1. Substances soluble in ether	3·18
2. ——————— in cold alcohol, and not in water	9·29
3. ——————— in cold alcohol, and in water .	10·66
4. ——————— in water, and not in alcohol .	3·14
5. ——————— insoluble in ether, in alcohol, and in water	67·78

(c) RESULTS OF THE ANALYSES OF CRETACEOUS OR HARDENED TUBERCLE.

The earliest analysis made was by Thénard and Lombard, who found in 100 parts—

Animal matter	3 parts
Saline or earthy matter . . .	96 parts.

L'Heretier found cretaceous tubercle composed of—

Animal matter . . .	5 to 9 parts
Phosphate of lime, Carbonate of lime . .	95 to 91 parts.

In a calcareous concretion from a bronchial tube, in a case of phthisis, the concretion being invested, and, according to chemical re-action, pervaded by membranous substance, Scherer found—

Organic matter	20·10
Phosphate of lime	69·92
Carbonate of lime	9·09
Chlorate of sodium, phosphate, and sulphate of soda . . .	0·89
	100 00

(a) Anim. Chem., Syd. Ed., Vol. II. p. 478.

Scherer also found, in a chalky concretion from the pleura—

Organic substances	36·967
Phosphate of lime	55·924
Carbonate of lime	7·109

Dr. Glover quotes from Simon's "Beiträge," the analysis of a bony concretion from lungs which contained many calcareous concretions. The proportion of incinerated salts was 61·11 to 38·89 organic matter, and 100 parts of the salts were composed as follow:—

Earthy phosphate	87·2
Carbonate of lime	11·5
Soluble salts	00·65
	100·0

Dr. Glover found, in a tubercle partially cretaceous, 24·80 of animal matter, and 9·00 salts; the salts were as follow:—

Chlorides, with a trace of alkaline salts	1·22
Salts soluble in water	1·90
Phosphate of lime	5·40
Carbonate of lime, a trace and loss	0·48
	9·00

Dr. Glover also found in lung concretions, dried animal matter, 07·7; incinerated salts, 22·4, composed thus:—

Phosphate of lime	16·45
Carbonate of lime	5·10
Sol. salts and loss	0·85
	22·40

Mr. Henry found, among various pulmonary tubercles—A. A few composed chiefly of carbonate and a few of phosphate of lime. B. A few of carbonate and phosphate of lime, with much ammonio-magnesian phosphate. C. A few of carbonate of lime, with ammonio-magnesian phosphate, and much phosphate of lime. D. (In a tuberculous bronchial gland), phosphate of lime, carbonate of lime, and animal matter.

There are two interesting points in these analyses: the approximative uniformity of the results, and the analogy in composition of these concretions to bone and bone earth. It is necessary to state, that F. Boudet gives different results. He found 701 parts of soluble salts and 295 of residue; the salts consisted of chloride of sodium, phosphate of soda, and sulphate of soda, and the residue of phosphate of lime, carbonate of lime, silica, and a small quantity of oxide of iron; but this differs so widely from all the other analyses in the proportion of soluble saline matter, that it is generally discredited. In general, the harder the tubercle, the larger the quantity of earthy salts.

In concluding the physical and chemical history of tubercle, it remains to remark, that there has been much controversy upon the question of its vascularity or non-vascularity. From the description here given, I think it must be perfectly clear, that tuberculous deposits are not essentially vascular. Although vessels may frequently be detected in them, and tuberculated structure and even tubercle may sometimes be artificially injected, the vessels always belong to the original tissue, and not to the deposit. Tuberculated structures are frequently vascular, in this sense, in their earlier stages, but the vessels become obliterated in the progress of the tuberculous development. Tubercle is sometimes deposited, more especially around the capillary vessels, which are only ulteriorly destroyed by compression. They are never supplied with lymphatics.

The question, whether tubercle is to be regarded as an organic or inorganic substance, has in like manner been the subject of almost interminable controversy. This question appears to me to be reducible to a very narrow point. Tubercle, regarded in the mass, is unquestionably inorganic. Regarded in its microscopic and chemical detail, we have seen, not only that it contains organic materials, but that a portion at least of these materials give unequivocal evidence of organisation. However imperfect the tubercle cell, its cellular form is irrefragable proof of the operation of the living principle. The question is, therefore, narrowed to this—whether the cells detected in tubercle are to be regarded as essential constituents, or as the rudimentary or effete remains of the tissues in which tubercle is developed. Dr. Addison appears to take the latter view; he regards tubercle as being composed essentially of retrograde or abnormal epithelial cells. Reviewing the whole of the facts, my own leaning is in favour of the former view—that the tuberculous blastema from tuberculous blood is frequently sufficiently vitalized to admit of the formation of imperfect cells. In this point of view, tubercle presents various gradations of organisation, from a substance containing numerous imperfect organic cells to one with no trace whatever of organic structure. In any case, when tuberculous matter becomes aggregated so as to be recognised as tubercle, organic growth by intussusception and the construction of tissues from cells soon cease to be possible, but in the earlier stages the morbid blastema is susceptible of imperfect cell-growth.

[To be continued.]

(a) "Glover on Scrofula," 1846, p. 67.

LECTURE
INTRODUCTORY TO THE LONDON COURSE OF MEDICAL STUDY.

KING'S COLLEGE.

By Professor E. FORBES.

We have assembled this day to commence the medical studies of a new session. It is my duty—a duty which, according to the custom of King's College, the professors of the medical department perform in rotation—to welcome you to your studies this year. It so happens that the office has fallen to the one among your instructors least connected with the medical profession. Although an old medical student, and consequently, I trust, sympathising with all your pursuits, I have long since deserted the ranks of physic to wander freely in the attractive fields of science. But I have never ceased to remember my medical studies with pleasure, or to keep up intimate relations with the most philanthropic of sciences. Whatever success I may have had in the pursuit of natural history, whether botany, zoology, or geology, I owe, and gratefully avail myself of this opportunity of acknowledging the debt, to the peculiar training acquired during a study of medicine; and, though it would be impertinent in me, especially in the presence of many whom I see around me, to pretend to advise you on the details of your more professional studies, there are some points bearing on those studies and the collateral sciences that form part of a medical education, upon which I may comment, possibly not without advantage, and speak the more freely owing to my non-professional position. I can bear disinterested testimony to the greatness of the profession upon which you are intending to enter—to its dignified and humane character—to the learning and energy and unselfishness of its members—to the admirable and enlightened spirit of medical education, especially as conducted in institutions such as this—to the great benefits which science generally owes to medicine and its votaries—and to the lustre which, in return, the scientific and literary acquirements of medical men cast upon their noble profession.

The studies which engage the attention, and occupy the time, of the medical student may be classified under three groups. Human and general anatomy, physiology, pathology, and materia medica, lay a sound foundation of accurate and indispensable knowledge. The theory of medicine and surgery acquired in the lecture-room, and an initiation into their practice by the bed-side of the patient, and the theory and practice of midwifery, complete his purely professional acquirements; but to form the accomplished physician or surgeon, and to complete a sound medical education, there is a third class of studies represented by chemistry, botany, zoology, and comparative anatomy. Each of these sections of science has, it is true, a direct and practical bearing upon medicine; but that is of little value compared with their educational importance, as means of training the observing faculties of the student.

On correct observation, on careful induction, the successful pursuit of medical science must be founded. Those who look only to results and final purposes are apt to underrate the value of a minute training of the observing powers. Just as in ordinary education classical and mathematical

studies serve to exercise, strengthen, and develope the mind, so as to enable it, in whatever direction its thoughts may eventually be turned, to meet the pursuits of life, and grapple with its difficulties with vigour and understanding, so do the sciences of chemistry and natural history prepare the student of medicine, whatever may be the line of practice to which he may eventually direct his attention, to observe the phenomena of disease with minuteness and accuracy, and to form rapid and just conclusions respecting their origin or progress. All the chemistry in the world, and all the natural history, would fail to make a man a good physician, regarded merely as so much knowledge in those sciences; but a practical acquaintance with the methods of observation in chemistry,—dealing as they do so much with the sequence of phenomena; and, in natural history, regarding as they do the exact definitions of the object,—cannot fail to benefit the student of medicine, and to give him power peculiarly applicable to the successful pursuit of his profession.

The value of the *training in observation*, which a careful study of such sciences as natural history and chemistry gives, cannot be too highly estimated. This great mass, even of educated men, consists of bad observers. The fact is conspicuously displayed when men attempt to describe what they see. The writings of travellers serve as examples. Many are famous for the vividness and apparent fidelity with which the scenery of the countries visited is depictured. Rarely, however, on beholding the spot described, can there be traced a correspondence between the glowing description and the actual prospect. It is the impression made on the individual mind, coloured by the health of the body at the moment, which is described, and which excites our sympathy, and is mistaken by the reader as well as narrator for a true picture of what was seen. There can be no great objection to this; indeed, our pleasure in reading is often thereby enhanced. It is different, however, when the traveller has to describe an animated object. Too well do naturalists know, that in scarcely any instance has a voyager who had either not been versed in zoology or botany, or had not received a medical education, been able to describe an animal or plant, however remarkable in its characters, or simple in its organisation, with sufficient accuracy to render his account of any value to science. It is not from want of painstaking inquiry; the creature is carefully looked at in every possible direction; every scale or hair is probably counted or attempted to be counted, and every character except the right one minutely scrutinised. Yet everything is misunderstood, and often every essential feature overlooked, whilst all that is casual is noted. Far more, and at the same time far less, is seen than actually exists. The imagination is set free, and the judgment mesmerised. The traveller has his eyes open and the object before him; but what *he* sees and describes is inside his head not outside of it. Hence the sea-serpents, unicorns, krakens, and other "chimæras dire," which from time to time are called forth by the fancies of worthy and often truthful men, too confident in the correctness of their unlearned eyesights, to astonish and delight the wonder-loving public, who, so long as the source of misrepresentation remains unexplained or undiscovered, regard the warnings and scepticism of naturalists with conceited scorn, and believe any absurdity rather than the simple truths of science.

Even among honest and earnest votaries of science, who have either entered upon its pursuit late in life, and have attempted original inquiry without a sufficient knowledge of its rudiments, or who have engaged in complicated researches without a previous training in the methods of observation, we are too often forced to listen to absurdities, visionary speculations based upon ill-observed facts, or fantastic misapprehensions of the facts themselves. This is especially the case with the crowd of untrained microscopic observers who daily enter inconsiderately on abstruse inquiries which demand, ere they can be successfully investigated, the sound foundation of a physiological education, of which correct observation is an essential element. The best instrument is only a source of deception, unless there be a trained eye and a sound head at the end of it.

When every day we are reminded, by what we hear and read, that without training few if any men are accurate observers,—a fact especially conspicuous in a country like ours, where the training of the observing powers is too often systematically neglected in the education of youth,—how important does it become, that, in the preparation for the practice of the medical profession, every means should be taken to form the student into a good observer. The mistakes and misinterpretations of travellers mislead but do not injure us; and in ordinary affairs in life people seem to get on tolerably well without half comprehending what they see about them. Even legislation, although affecting deeply the happiness or misery of millions, frequently cannot be conducted without sensible danger by men whose inaccuracy of observation of ordinary things makes us reasonably doubt their capacity to investigate the moral phenomena upon an accurate knowledge of which legislation should be based; but in the practice of the medical profession, defective powers of observation or incapability, through defective training, of noting accurately the phenomena of disease, must inevitably endanger alike the life of the patient and the reputation of the practitioner. On one mistake in the observation of a fact, a long train of false reasoning may be founded, pernicious enough in any pursuit, but destructive in medicine. Never be led astray, then, gentlemen, by the fallacious notion, that the study of the sciences collateral with medicine, and adopted, through the experience of the legislators of the profession, as essential portions of medical study, are the less important because they do not deal immediately with the practice of medicine. Rest assured that the student who, through a just attention to them, becomes well versed and adroit in scientific observation, will in the end be the most successful in the pursuit of professional fame.

The experience which I have had of my own class has shown me, that the students who have gained the highest distinctions in the science which it is my duty to teach are exactly those who have distinguished themselves most in their more strictly professional studies. Distinction in one subject is scarcely ever gained without a diligent pursuit of all, and never, so far as I am aware, without that line of conduct which marks the student in all his actions as a gentleman and an honour to his college.

The history of the rise and progress of medicine and its collateral sciences shows how intimately they are connected together, and how surely their development is mutual—a parallelism, doubtless, dependent on the identity of the methods of investigation which have brought about their present high position. In the ancient world, with a few bright individual exceptions, and those bright more by the force of genius than of sound knowledge, medicine was empiricism, chemistry was non-existent, natural history, with the single exception of the works of that most wonderful of human intellects, Aristotle, a mere heap of old women's tales. During the ages which were illuminated by many of the brightest geniuses in history, poetry, and eloquence, the sciences of observation were almost wholly neglected. Yet who can doubt, that if the men who then wasted vast intellectual powers over hypothetical speculations, had applied themselves to the solving of Nature's secrets, by casting aside the false pride of intellect wrapped up in a web of sophistry, and by going humbly to Nature's own fountain, there to drink the waters of truth, and, by questioning the sources of the spring, to learn modestly, through sedulous observation and experiment,—who can doubt, that not only would the world have far advanced in chemical and physiological knowledge, but the anguish and suffering of millions would have been relieved, and myriads snatched from premature death, which even a moderate progress in medical science would have prevented? Yet too true it is,—as true now as anciently,—that men, as a mass, have a tendency to prefer the vague and obscure region of hypothesis to the bright and open fields of truth, arrived at by the simple paths of observation and induction. In the course of your future professional career, many of you may be sorely tempted to wander aside into the dark and hazy way, even as now we see the phantom fancies of homœopathy and similar will-o'-the-wisps occasionally followed by men intended for better things,—to the unbalanced and untrained imaginative mind there are great temptations to pursue eccentric paths,—but ground yourselves well in all your professional studies, whether practical or collateral; train yourselves well to exercise a rigorous observation and an unbiassed judgment; and you will not only be secure in your own progress through a successful career, but also have the high gratification—always dear to a well-regulated mind—of advancing the science which you have chosen as your profession, and earning thereby the gratitude of those who will come after you.

[illegible], and natural history, commenced to assume their scientific character when men began to acquire knowledge through the interrogation of nature. Medicine was foremost, for, by the anatomical researches of Vesalius the foundation-stone was laid of modern physiological science, as well as of practical medicine and surgery; and the whole course of the life of that great man shows how thoroughly he understood the bearing and importance of his own researches, and the strong and proud faith he held in the truthward direction of the bold path he had chosen. The brilliant discoveries and philosophical views of the great men who followed,—of Harvey, of Asellius, of Malpighi, and others, who steadily marched in the course of careful observation and, at the same time, bold reasoning, serve as bright illustrations of the sure way to discovery.

The strength which medicine may gain by a union with the collateral sciences, and by the following up of the methods of investigation most appropriate to it and them, is finely exemplified in the life and works of Haller. In that illustrious man you have the type of the accomplished physician, a model to set before yourselves for imitation. The more brilliant the pattern you seek to imitate, the nearer are you likely to approach its perfection. A student cannot be too ambitious in his aims at excellence, and if he fail in attaining the height to which at first he aspired, he will never regret having made the attempt. The effort to rise itself raises us. The imitation of the excellencies of a great and good man is itself a step towards greatness and goodness. The vast combination of sound knowledge which distinguished Haller, and the greatness to which he attained, although likely to be acquired by few if any hereafter, should not be regarded as exceptional and inimitable, but rather be studied with a view to the discovery of the manner in which that knowledge, and wisdom, and greatness was attained. Such men appear among us to show us how much it is possible to do not to deter us from attempting to do again that which they did. And how did this mighty physician and philosopher become what he was? By careful and incessant observation, by sound and common-sense reasoning, by bold thinking, by incessant industry, without ever neglecting the common duties of life. By such a course did Haller attain his pre-eminence. Who will dare to say that the path is not still open to every one? Few possess his genius, but all are capable of treading in his steps; and, if they cannot become as great, need only to work as he did; use good sense, diligence in study, determination to let no opportunity of learning pass; resolve to leave none of the duties of a good citizen undone, or to neglect any of the means—far more abundant now than in the days of Haller—of acquiring a refined taste, and an ample acquaintance with literature as well as with science, and they will be sure of future professional success.

Gentlemen,—Never forget that King's College seeks to send forth *accomplished* members of your profession. And I think I may say, without boasting, that the men who have gone forth from these halls hitherto have been such. To send forth fresh relays yearly of young physicians and surgeons, not only well versed in their profession, but ready to take a foremost position in the ranks of gentlemen and scholars,—this is our pride, and we feel confident, that in those of you who are now about to commence your studies here, that pride will not be disappointed. You will find good examples and worthy associates in those around you who have advanced some way in the course of their studies;—men who will let no opportunity pass for doing honour alike to themselves and to the college which boasts of such pupils. You will enjoy great advantages here. I speak not of the instructions of my colleagues; they will answer for themselves. I allude to the advantages of the college as a whole, to the beneficial effects which are sure to follow from the connexion of professional education with an institution under whose roof all departments of literature and science are sedulously prosecuted, and within whose walls the sacred truths of religion are earnestly and continually enforced. Such a combination cannot fail to influence the mind for the better; to generate a genial and catholic spirit,—a spirit of appreciation, one which leads us to recognise the excellence and beauty of all branches of intellectual study, whilst we engage with enlightened zeal in the pursuit of that which we have especially selected for our own.

There is a vulgar prejudice which still holds with weak or uneducated persons, but which will disappear before the progress of enlightened education, that to be eminent or able in the medical or any other profession, the less you have to do with other sciences than your own the better. Like many a sorry weed, it has a deep root in uncultivated ground. A more absurd, or more pernicious fallacy could not have taken hold of the popular mind. I mention it because it is mainly opposed to all I have said this morning. What is the real state of the case? Read the lives of the great physicians and surgeons of the past; inquire into the acquirements of those who now hold the foremost rank; and what do we find? Instead of answering to the vulgar notion, they have been and are exactly the reverse. Past and present they have been scholars and gentlemen, men of science or men of taste, each and all possessing knowledge and acquirements in no small degree out of the course of their profession. I speak of men in active practice. The whole history of the profession shows that even a deep and original acquaintance with various branches of science or learning is quite compatible with the successful and diligent pursuit of the practice of the medical profession. In all professions, provided a man knows his own thoroughly, the more he knows out of his peculiar pursuit, the more enlightened is that man, and the better able to follow his own occupation with success and originality. It would be easy to point to numerous examples of what I say, both in London and in the country. In my own science I could call to witness the vast services which have been rendered to it, and the minute and original inquiries conducted by members of the medical profession who are engaged in arduous practices, and were never known to neglect a patient. Let no one persuade you, gentlemen, that a neglect of science or of literature is necessary to professional success. Never let either interfere with the fullest attention to your professional studies, but at the same time always bear in mind, that accomplishments will ever add lustre to the profession to which you belong.

One of the greatest misfortunes which, in my judgment, have afflicted the medical profession, has been the separation of the seats of medical education from those of learning and science. The tendency of such an isolation of professional studies is to contract the ideas and narrow the mind of the student, and to send him into the world, at the conclusion of his educational career, deeply imbued with the pedantry of his own science, and unjustly undervaluing the merits of other branches of knowledge. Strong and naturally tasteful minds develope themselves untainted and uncontrolled, in spite of impediment; but too many of less independent constitution go forth to exemplify the truth of my remark. Of course this applies to those only who have spent their youth exclusively in the isolated schools of medicine. They are debarred from the genial influence of collegiate and university associations. However well they may be versed and instructed in the practical departments of their professional education, they have too often neglected the collateral studies, or been taught them in such a manner, that all the benefits which should accrue from a scientific training are lost. Too many men are thus sent out into the world, who, by not coming up to the standard to which every medical practitioner should aspire, tend to lower the estimate in which men in general should hold your profession. You, gentlemen, will escape those evils; and it is for you, by diligently and successfully availing yourselves of the advantages of a collegiate medical education, to mantain hereafter that dignified and honourable place in intellectual society which is the true position of the members of the medical profession.

Always, in all you do, bear in mind the inherent nobleness of your profession. It is too true, I know, that, in our country, the higher social honours never fall to its share—that, whilst nobility and high place in the state are accorded freely to the cautious and wily politician, to the astute and industrious lawyer, to the brave, though possibly unintellectual soldier, and even to the successful accumulator of wealth, the man whose life has been spent in alleviating the sufferings of his fellow-creatures, and who has devoted a fine and cultivated intellect to studies by the bedside of the sick,—it may be in the successful hope of discovering means whereby to soothe the bodily anguish and benefit the health of generations to come—must look for his reward in his own commending conscience, and in the generous approbation of his fellow-labourers in science. But, after all, gentlemen, that reward is nobler than any worldly distinction or high-sounding title—honours which, even when acquired, would probably be shared with a majority unworthy of honour. The names of the benefactors of mankind, whether through

philanthropic exertions, or their labours in science, in literature, and in art, shine as bright stars in the firmament of fame, when the time-serving notabilities of even yesterday have been extinguished and forgotten. The mass of mankind scarcely know how much of the lives of the members of the medical profession—of all, I might say, without exception—is devoted to disinterested, unrewarded, charitable, and philanthropic exertions, for the benefit of their fellow-creatures. The money-gathering citizen, the place-hunting politician, the pleasure-seeking idler, see the chariot of the successful physician pass by, and deem his hours daily and nightly are devoted to the accumulation of lucre, through the exercise of his professional learning. Those who know the profession better, the haunts and habits of medical men, know how, whether successful or unsuccessful, the cry of the poor and penniless sufferer is never uttered in vain, and no time grudged, and the purse-strings freely loosened, where no fee is looked or wished for. Poor or rich, successful or struggling, the members of the medical profession are ever found by the bedside of the miserable and penniless, aiding alike with their skill and their purse, and soothing the sufferer by kind words and consolation. In the haunts of misery, among the hovels of wretchedness, everywhere you will find them pursuing their silent way, unobserved save by those who have benefited by their kindness and help, and whose warmly-bestowed blessings are a greater reward than the most brilliant decorations which monarchs can bestow. It is this course of action, gentlemen, which constitutes the nobleness of your profession. Follow in the footsteps of those who have preceded you; go and do likewise; study earnestly and diligently here, so that you may be successful in your professional career hereafter; heap up by your knowledge and accomplishments the fame of the college to which you belong; and you will earn the substantial rewards of your professional skill from the rich and the far-more-to-be-valued blessings of the poor.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS ON VARICOSE VEINS AND VARICOSE ULCERS.

By THOMAS W. NUNN, Esq.,

Surgeon to the Western Dispensary; Demonstrator of Anatomy at the Middlesex Hospital, &c. &c.

The most prominent objects of the superficial anatomy of the upper and lower extremities are the large subcutaneous veins. The purpose of these vessels is not limited to the return of the blood from the integument. There is a most important relation between them and the vascular system appertaining to the more deeply seated parts. They offer a free passage to the blood of the limb, on its way back to the heart, during the time the *venæ comites* are undergoing compression by the contracting muscles. One may compare these superficial veins to the compensating adjustment of the chronometer, both having the object of providing for a uniformity of performance under varying conditions. The unobstructed route thus presented to the returning blood, acts as a guard against the contingency of congestion of the active organs from whence it comes, namely, the muscles.

Bearing in mind the necessity there exists of the equilibrium of the circulation being maintained, the importance and beauty of this arrangement will appear obvious; and we might reasonably, *à priori*, imagine that the muscles would have some special protection against the liability to congestion, when we remember that all the muscles of a limb may instantaneously pass from a state of repose to one of active contraction. The immediate interference with function which follows the congestion of any other organ of the body, is familiar to all, even though it be produced by temporary causes.

It has been asserted by physiologists, that muscular contraction assists the circulation of the blood in the veins; if this be true in respect of the deep ones, the almost instantaneous distension of the superficial veins of the limb following the contraction of its muscles must seem to be rather paradoxical, since the increased flow of blood to the part would scarcely account for it. The simultaneous contraction of the muscles of a limb would compress the deeply seated veins, and thus accelerate the transit of the blood they might contain at that moment of time; but it is quite clear, that this same compression would immediately afterwards be converted into an opposing force. When the contraction is rhythmical, the result would be different; but the above refers only to compression of the veins from continued contraction. The idea intended to be conveyed is not that the return of the blood from the limb, taken as a whole, is in any way interfered with by an active condition of its muscles, but that its circuit is varied; namely, that it is diverted into the superficial veins, which veins empty themselves into the main trunk, at a point protected from muscular compression.

Now, in the next place, let us see what are the distinguishing characteristics of veins as compared with arteries: Firstly, they have much thinner coats, or, more correctly speaking, they are almost deficient in respect of what is called the muscular coat; and, secondly, they have, with certain exceptions, valves interspersed throughout their entire length. The valves are composed of the serous coat of the vein itself, reflected over a framework of *inextensible* fibrous tissue, and, although they are so thin as to be almost transparent, yet are nevertheless capable of withstanding a very considerable amount of pressure. Their extreme tenuity allows of their perfect apposition to the sides of the vein, and prevents their acting as an impediment to the normal course of the vital fluid. It would be superfluous to add anything concerning the mode of action of these valves; it is familiar to every one; but I wish to draw attention to the circumstance of the thinness of walls of the veins. I take it that there is more meaning in this than simply that force of the blood being less, canals of inferior strength are required. It seems to me, their capability of collapsing must ensure a more rapid and complete action of their valves; for, when a vein is comparatively empty, and therefore collapsed, the edges of a pair of valves will be almost in contact, and thus prepared to act at the least impulse from a retrograding current. As an additional argument in support of this theory, I would adduce the fact of there being no valves in the thick portal veins, and also that the sinuses of the brain, which, from their relation to the dura mater, are incapable of collapsing, are likewise unprovided with valves. Prominence is given to these points, on account of the explanation they offer, if they be founded in truth, of the results of the morbid changes which so frequently occur in veins, or, in other words, refer to the phenomena attendant upon a varicose condition of this set of vessels.

Having said thus much in respect of the physiology of veins generally, I will enter upon the subject of the pathology of varicose veins, since that is more particularly the object of this paper. I arrange the different varicosities under three heads.

1. Dilatation without any other change; the nutrition of the vein keeping pace with its distension.

2. Dilatation with attenuation of the walls of the vein . . { *a*, nutrition not keeping pace with distention; *b*, from the occurrence of absorption.

3. Dilatation with thickening and hardening, either throughout the whole length of the vessel, or only at particular points.

M. Andral(a) enumerates six varieties of the disease to which the veins in general are liable. With due deference to so great an authority, I have attempted in some measure to simplify the matter, believing that the other varieties may be referred to one or other of the above-named; but, wishing to confine my remarks to such points as refer more particularly to varicose conditions of the veins of the lower limb, I purposely avoid entering into further details. Whether other forms of varicosity can or cannot be shown to take place in other parts of the body, at any rate, the three kinds I have enumerated will, as far as I know, be found to comprise all that are met in the inferior extremity.

The three varieties do not always maintain themselves distinct from one another; on the contrary, they have a direct tendency to become combined; indeed, they sometimes appear to be merely different *stages*, instead of different varieties of the same disease; but, nevertheless, cases occur which justify one in considering them in the manner proposed.

(a) Précis d'Anatomie Pathologique. P. 400, Vol. II.

Having given the varieties of varicose vein, perhaps, before going further into their pathology, it may be well to enter upon the subject of the causes which originate the varicosity. There are two distinct agents which may produce the disease,—one being the *vis à tergo* acting against an obstacle to the return of the blood within the vein itself, and the other the hydraulic pressure of the columns of blood; the former arising from a vital action, and the latter being a purely physical effect. Each of these causes may act in two ways; thus—

Vis à tergo causes disease when . . . . . { *a*, there is pressure on the main trunk, as from a distended uterus; *b*, there is constriction at the junction of the superficial with the deep vein.

Hydraulic pressure causes disease when, ... { *a*, the walls of the veins are naturally weak, or the skin does not yield sufficient support; *b*, through too long-continued exercise it has permanently over distended the vessels.

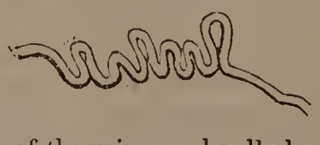
Returning to the pathology of each variety of varicose veins, it is evident that little can be said concerning the first, beyond mentioning the fact, that just in proportion to the increase in diameter, an increase in length will take place, unless there be some disturbing cause; fluids press equally in all directions, and, therefore, there will be equally as great a tendency to lengthen and to widen.

When dilatation takes place with attenuation, from a deficiency of nutrition, we have a condition equivalent to, though not precisely identical with, atrophy of the walls of the vein; but, when absorption takes place, a similar process to that which occurs when a part is subjected to undue pressure is called into activity, and, as a consequence, giving way of the vein, with hæmorrhage, follows.

The third variety, namely, where there is thickening, presents by far the most complicated and interesting series of changes. I believe it affords the best illustration to be found in the whole body (if we except the kidney) of the results of chronic, or rather subacute inflammation.

In every case of this kind, the following history will obtain:—1st, distension, causing, 2ndly, inflammation and deposit of lymph in the walls of vessels, involving a loss of the capability of collapsing; 3rdly, inflammation of serous lining and injury to the valves, with formation of clots, which may or may not obstruct the trunk; 4thly, this inflammatory thickening extends from the minute branches up to the capillaries, where complete obstruction much more readily takes place, and a most serious interference with the healthy nutrition of the skin occurs, and the liability to what is called varicose ulceration is established.

In that form of varicosity where the nutrition of the vein keeps pace with its dilatation the more serious results do not *necessarily* follow. Frequent attacks of cramp, disagreeable tingling, and numbness, constitute the principal inconveniences *usually complained of;* although the subject of such a state of vessels is always *doubly* liable to evil consequences from violence to the vessels which are thus prominently placed in the way of injury. We find, *in cases of this sort*, also, the best examples of the effects of the equal pressure of fluid in all directions—the lengthening of the vein coincident with its dilatation. The accompanying cut is made from a drawing of one of the small veins lying obliquely across the leg, a little below the knee. It represents a length—two and a half inches only—of the vessel in which, it will be observed, no less than six reduplications have formed.



This condition of the vein can hardly be called diseased; it is generally rather a symptom of some obstruction in the main trunk, or at the junction of the superficial with the main trunk itself, and will subside on the removal of the exciting cause. I have seen the veins of the leg of a pregnant woman frightfully enlarged, and yet, after confinement, scarcely exhibit a trace of their former state. This abnormal condition not arising from any fault of the veins, has not the tendency to run on to further mischief that the other two kinds exhibit. It is not within the limits of this paper to enter into all the sources of obstruction, but I would particularly draw attention to a fact first pointed out by Dr. Herapath of Bristol, that constriction may exist at the saphenous opening, from an unusual attachment or direction of the fascial margins of that aperture.

Dilatation with attenuation of the walls of the vein is very rarely met with in its simple form, and seldom progresses equally throughout the entire length of the vessel. There seems to be a greater tendency to dilate at that part of the vein immediately above a valve. The cut annexed shows the change referred to; it represents a portion of the internal saphena vein, about three or four inches above the knee of a *male* patient of about fifty years of age. It might, at first sight, be taken for a simple tortuosity, but close inspection reveals its true nature. ..

This change is much more frequently observed below the knee than above, the vein in that locality not being supported by the lace-work of fibrous bands, which a careful dissection will show protects and supports the vessel above. When absorption occurs at the same time, that by no means uncommon accident, bursting of the vessel at the attenuated point, attended with profuse and sometimes fatal hæmorrhage takes place. The point in the vein where this attenuation or absorption is going on, is readily recognised by the almost circular dark blue, somewhat raised spots, about the size of a pea, which, on being touched, yield, and allow the finger to sink below the level of the skin. It is a matter of every-day observation to find pressure producing absorption, and we have here an example of the process. The pressure of the column of blood within the vein is such as not only to interfere with its nutrition, but frequently to excite the more rapid action of absorption and ulceration of its coats. Whether this ulcerated spot shall form the commencement of what is called a varicose ulcer or not depends, I believe, upon the state of the surrounding tissues, to which I shall hereafter refer.

As before stated, that form of varicose veins in which thickening forms a prominent feature, is by far the most serious in its consequences and complicated in its mechanism, if one may use such an expression. I have already enumerated what may be considered as the progress of the disease, viz., distension, inflammation, thickening, interference with the action of the valves, deterioration of the valves themselves, and extension of the inflammation to the capillary veins, with derangement of the nutrition of the skin. The affection may be characterised as a state of subacute inflammation of the superficial and integumental venous system. Clots are found in veins suffering from this subacute inflammation. These clots have been variously noticed by different authors. Sir B. Brodie says:—"It is very remarkable that the blood in inflamed varicose veins coagulates, and they become choked up with coagulum. There seems to be something in an inflamed vein that is unfavourable to the fluidity of the blood."(a)

Mr. Hodgson says: "The blood occasionally deposits strings of coagulum in varicose veins."(b)

M. Cruveilhier says: "Where dilatation occurs uniformly at every point of the circumference of the vessel the blood circulates freely, *there is no varix;* but if one point of the circumference undergoes a change of structure, it yields, and then the blood is detained in it, and a small spherical thin pouch is formed; in this the blood coagulates, adheres to its interior, loses its red colour; and in the centre of the pale fibrine, calcareous concretions are produced."(c)

The general opinion seems to be, that the clots form more from mechanical stagnation of the blood than from any other cause. This theory, I think, must fall to the ground when

(a) Brodie's Lectures Illustrative of Various Subjects in Pathology and Surgery. P. 165.
(b) Diseases of Arteries and Veins. P. 541.
(c) Cruveilhier's Anatomie Pathologique, liv. xvi.

the proper value is attached to the fact, that the blood in vessels equally tortuous but not in an abnormal condition, does not become prone to the formation of clots.

When the blood becomes, as it were, incarcerated by the peculiar anatomical arrangement of the veins, as in hæmorrhoids, then the clot may with reason be ascribed to simple stagnation, but in a vessel like the saphena veins the same favourable conditions for stagnation will not be found.

If it be admitted that varicose veins are liable to subacute inflammation, there can then hardly be a reasonable objection to the theory of the clots having their origin in the effusion of lymph on the sides of, or into, the vein itself, and to explaining them on the same principle, that one accounts for the existence of the shreds and flakes of coagulated lymph in the fluid of an inflamed peritoneum or other serous cavity.

It may at first sight appear strange that a simple alteration in the condition of the walls of the vein, viz., thickening, should give rise to such a train of mischief; but if we glance over the usual results of changes in the arterial system, there will then be found no difficulty in conceiving the possibility of what I have stated being true. With what grave consequences a very small amount of thickening of any of the valves about the heart, or an almost inappreciable roughness of the arch of the aorta, is attended. The whole body is constructed originally so perfect, and every part of it is so accurately adapted to the proper performance of its respective function, that not the slightest change can take place in any part without detriment to the system, if some action having a tendency to neutralize evil be not aroused.

The peculiar ulcer attendant upon a varicose condition of the veins has its pathology explained in the foregoing statements. In some respects it is analogous to an ulcer dependent upon the deposition of tuberculous matter. Where there is the presence of tuberculous material, the phenomena presented are due not solely to the effort Nature is making to rid herself of it in the light of a foreign body, but the process of nutrition of the part modified. In the varicose ulcer, instead of tuberculous deposit we have the presence of lymph, within and about the vessels, and dependent upon the presence of such deposit is the abnormal process, ulceration; the CONGESTION of the venous system is not sufficient to account for the ulceration, for we see examples of venous congestion in other parts not followed by analogous ulceration. For instance, in cases of varicocele; and, moreover, varicose veins of the simple kind, may exist to a very great extent without there being, at the same time, ulceration of the varicose character.

It will be seen, that I have ventured to give an account of varicose ulceration somewhat different from that generally received. Sir B. Brodie, in the lectures before referred to, makes the following observations, which are to be found at page 166:—

"In old cases of varicose vein, you will frequently find the skin become affected with a chronic inflammation, that is, it will look red, and be very irritable and tender. Sometimes the cuticle is, as it were abraded, and an ichorous discharge takes place from the red cutis. Occasionally the whole of the skin of the legs is in this condition. In other cases there is a chronic inflammation of the cellular membrane. There is an effusion of serum into it, and the limb becomes œdematous. Where there is disease of the heart preventing the due passage of the blood through its cavities, the fluid part of the blood is liable to escape from the capillary vessels, and thus you have anasarca of the legs. But the swelling which takes place in varicose veins does not exactly correspond to anasarca connected with disease of the heart.

"It is the result of an inflammatory action in the cellular membrane, and the fluid has a more distinctly serous character. If you puncture the parts with a needle, the fluid, being of greater consistence, does not flow out so rapidly as the thinner fluid, which escapes after puncture in a case of anasarca. The inflammation of the skin and the inflammation of the cellular membrane, in these cases correspond with each other. There is an exudation of serum in one case from the surface of the skin, and in the other from that of the inflamed cellular membrane; and these inflammations are analogous to what we meet with in other cases of venous congestion."

Again, at page 167, "where there is this deposit of lymph in the cellular membrane round the vein, the skin becomes inflamed near it, and this may give rise to a troublesome ulcer." * * *

"The more usual history of a varicose ulcer is as follows:—The skin is distended at some point, and a scab forms upon it; where the scab comes off there is an ulcer, and the ulcer spreads."

All practitioners must be familar with an appearance the skin of the leg very frequently puts on, where the veins are thickened and varicose. I allude to the brown discoloration of it, precisely similar to a mark left by a bruise. Now I take this as one proof that the mischief begins in the minute vessels; for, if this darkened patch be not attended to, it will become an ulcer in due time; and I have noticed, that, exactly as the veins improve under treatment, so this discoloration diminishes.

There is a condition of the skin, dependent on varicose veins, sometimes met with, that I think has escaped the observation of writers on the subject. It seems as though the effusion of lymph had been followed by the same consequence as is sometimes observed in other localities,—the liver, for instance,—namely, by contraction. The integument appears tightened and contracted, it is hard and inelastic, like a cicatrix, and very often extremely painful. On entering into the history of the case, we find that there never has been ulceration. We can account for this by supposing that the inflammatory action has stopped short of ulceration, and that the lymph has then slowly undergone that process to which it appears to be prone.

I have stated, in the first part of this paper, that it is during the exercise of a limb,—that is, whilst its muscles are actively and powerfully contracting,—the superficial veins are most employed. if the call upon the superficial veins be too great, from long-continued exercise, the danger of inflammatory varicosity arises, particularly where there is predisposition to this simpler form of the disease. Accordingly we find, that most patients affected with varicose ulceration have undergone, and too often are compelled to continue, the endurance of great bodily exertion, or are condemned, by the nature of their occupation, to maintain an erect posture for many hours during the day. A vast variety of employments, on this account, unfavourable to a healthy condition of the veins of the leg, will at once suggest themselves.

Having thus shortly given the varieties and causes of varicose veins, with some imperfect remarks upon the pathology of them, I will now proceed to that most important topic—Treatment.

Since the time of Celsus up to the present, active meddling with the veins has been gradually becoming less practised.

Extirpation, incision, puncture, tying, cutting through, cauterisation, ligature with needles through and under, lateral compression, have successively been advocated.

I find, in "The Workes of that famous Physitian, Dr. Alexander Read," London, 1650, the following paragraph:—"If a varicous ulcer be offered unto you, which contemneth ordinary meanes, my counsell is, that you take up the varix above and below, as you do the veines of the temples in inflaming eyes, and open it between the deligations, that the blood may be discharged out of it. This operation any one will admit, if he be not too tender."

But we see that even this comparatively gentle treatment, though practised many years afterwards, has been abandoned like its predecessors — excision and nstion — concerning which, the above-named anthor remarks, "*it is not to be thought that any in this our tender age will admit either of these two operations.*"

Mr. Vincent says,(a) "I am so fully impressed with the efficacy of friction for procuring the healthy state of veins, that all persons who have varix should not omit the flesh brush, which will do more than bandages or any other contrivance to strengthen and restore veins."

Rules for the treatment of varicose veins cannot be laid down irrespective of their peculiar nature and of the exciting cause. We must ascertain, in the first place, whether the varix arise from an obstruction to the current of blood in the trunk of the vein, or whether the veins have yielded from having a too great task imposed upon them; and, in the second, whether the varix be of the inflamed or non-inflamed kind.

Where the obstruction depends upon compression of the iliac vein within the abdomen, of course little can be done

(a) Observations on some of the Points of Surgical Practice. P. 222.

beyond affording all the support possible by bandages and laced stockings. Fortunately, a permanent obstacle of this kind is rarely met with, although a temporary one, the gravid uterus, is one of the most frequent causes of varicose veins, which, beginning thus, often become inflamed, and remain a source of inconvenience after pregnancy has terminated: therefore, too great care cannot be taken in the management of cases of this description. The deep veins likewise suffer from the same obstacle; but, being more supported, escape injury.

That obstruction may occur at the point where the saphenous veins perforate the fascia lata to join the deep femoral or popliteal, I have before stated, was first noticed by Dr. Herapath.(a) The treatment he recommends is the dividing the fascia at the seat of stricture. I have no personal experience of this mode of practice; but it seems so well founded upon proper principles, that it, in a high degree, deserves the attention of surgeons. I therefore quote the words of Dr. Herapath:—

"The operations hitherto adopted relieve by obliteration of the vein; consequently, advantage is taken of anastomotic communications, and the circulating current is simply carried on by other venous trunks.

"But the plan I have proposed, and tested by experience, is more eligible, as it restores the circulation in the natural direction by removing the cause of the obstruction." * * *

"If proper judgment be exercised in selecting cases for trying this mode of operating, I have very little doubt that, in skilful hands, it will always give the expected relief."

Dr. Herapath details a case in which

"The internal saphena and its branches alone are varicose. The tributary branches on the inner side of the belly of the gastrocnemius muscle are tortuous and much dilated. A swelling as large as a walnut occurs at the inner border of the internal condyle of the femur.

"The walls of the vein, and the skin over them, are so thin, that there is imminent danger of bursting at this spot, from which, nearly up to the saphenous opening, the vein presents one regular tube-like form, and is much dilated, being nearly as large as one's third finger; but, at about one inch and a half from this fascial aperture, the vein is swollen to the size of the first phalanx of the thumb. The pudic and iliac branches of the vein are also somewhat enlarged and varicose; the branches on the dorsum of the foot, and below the calf, are not much above the ordinary size; the popliteal vein cannot be felt; the external saphena is perfectly healthy; the spermatic veins are also nearly normal."

Dr. Herapath having made an incision three inches long, by pinching up and transfixing the skin over the structure, dissected away the superficial fascia from the edge of the falciform border of the iliac portion of the fascia lata, and cautiously divided that process to the extent of half an inch.

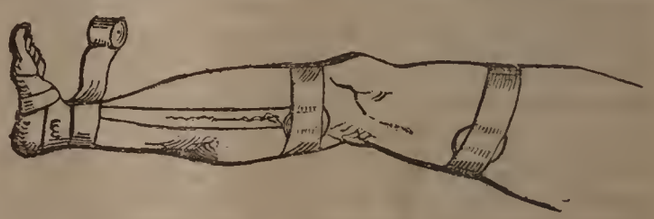
Dr. Herapath concludes by saying, "This operation succeeded even beyond my most sanguine expectations. The simplicity of the remedy is a great recommendation in its favour. With efficient assistance at hand, I believe it an operation destitute of danger, with moderate caution and a clear knowledge of the relation of the important parts in the vicinity." * * * * *

"For my part, it has greatly surprised me that no one appears *to have thought of such a cause or cure for varix*,—it is so simple and so natural an idea to an anatomist and surgeon; yet I have carefully examined every surgical author without obtaining even a hint of this idea of its nature, or a remedy like the above proposed for its cure."(a)

In respect of this operation, a question of the first importance is, what would guide us to the diagnosis of constriction of the saphenous opening? I should be inclined to say, the varicosity being confined to the internal saphena with coincident distension of the superficial iliac, pudic, and epigastric veins, which empty themselves into it just before it passes under the falciform process, the spermatic and external saphena being healthy.

As far as my own experience enables me to speak, I cannot say that stricture at the saphenous opening is at all usual; I have never met with more than one case where such seemed to be the cause of the disease. I did not put in force Dr. Herapath's operation, on account of the circumstances of the patient.

Varix not arising from obstruction, or when, although originally caused by it, is yet continued by hydraulic pressure, admits of treatment upon different principles. The evil in this case is caused by the column of blood which circulates in the superficial veins; therefore the clear indication seems to be, to prevent its *circulating as a column* any longer. If the advantage to the œconomy obtained by the return of the blood through the superficial veins be more than counterbalanced by the injury arising from a diseased condition of that part of the mechanism, a plan of treatment which compels the returning current to find its way back to the heart through the deep veins must have the countenance of common sense. I have put in practice a method founded upon this principle, which I will describe, although I am, I believe, not entitled to claim the entire originality of it.(a) It consists in the adaptation of pads to the trunk of the vein, at those points where pressure can be applied with the greatest ease, namely, just below the knee and at the middle of the thigh. The wood cut subjoined will illustrate what is intended to be expressed. The pressure on the pads can be exercised by adhesive strapping, which is best made of chamois leather, as that material is less likely to cut the skin; or by broad straps of vulcanised india-rubber with buckles.(a)



A bandage to the leg, or laced stocking, is of course auxiliary, but forms no essential part of the treatment.

This plan applies, not only equally well as to varicose ulcers as to varicose veins, but is especially useful to them, inasmuch as it does away with the necessity of covering the ulcer. If we cover up an ulcer, we do what is equivalent to closing the orifice of a sinus,—we confine the secretion, and thereby cause pain. Where patients cannot be dressed every day this is a matter of considerable importance.

Mr. Critchett, in his valuable lectures on mechanical support in the treatment of ulcers,(b) impresses strongly the necessity of strapping the whole leg with great firmness, and observes that the dressing should be renewed day by day. In many cases this is an impossibility, and, therefore, I was led to adopt some plan which obviated this disadvantage. I think we find an explanation for the great good that the tight strapping does, in the fact that pressure produces absorption; the thickened vessels are restored by the pressure of the tight strapping to a healthy state.

The plan here advocated takes away the *causa mali* by removing the column of blood, and leaves the diseased parts to recover themselves with as little interference from the surgeon as possible, and subjects the patient to a vast deal less pain, since the most irritable parts are not touched.

There is no danger of strangulation. I have employed these pads and straps in a great number of cases without this inconvenience occurring. The returning current is not arrested, it is merely diverted from an unhealthy into a healthy channel. Water-dressing to the sore is all that is required.

I have applied, in some cases where the inflammatory thickening of the vein was very considerable, and where there has been no ulceration, mercurial ointment spread upon a long narrow slip of linen, and over this a long graduated compress, to the whole length of the vein, from the knee to the ankle, in the manner displayed in the cut, and have found the application attended with the best results.

When pain and tenderness accompany varix, leeches along the course of the trunk afford great relief, and I would particularly recommend what might seem superfluous precaution in treating cases when this occurs; for if the inflammatory state be checked or cured, the disease becomes

(a) *Lancet*, August 12, 1848.

(b) I have lately been favoured by a communication from Dr. Herapath, in which he informs me that the patient on whom he performed the operation "continues to be perfectly free from any return of the varix."

(a) I am informed that a somewhat similar line of practice has been adopted by Mr. Wormald at Bartholomew's Hospital.

(b) These can be obtained at Messrs. Biggs and Son, of Leicester-square.

(c) *Lancet*, Vol. II., 1848.

so much more simple in its nature and manageable in its character.

I have not appended cases to this paper. The history of cases of varicose veins and varieose ulcers presents nothing of sufficient interest to warrant my occupying the pages of a weekly journal; but I nevertheless trust the foregoing observations will not be taken as mere theory, but as the result of attentively watching the effect of treatment.

17, Stratford-place.

CASES ILLUSTRATING THE FAILURE OF THE OPERATION OF PERINEAL SECTION, FOR THE CURE OF STRICTURE OF THE URETHRA AND FISTULA IN PERINEO.

By JOHN LIZARS, ESQ., F.R.S.E.,

Late Professor of Surgery to the Royal College of Surgeons of Edinburgh, and Senior Operating Surgeon to the Royal Infirmary.

The practice of surgeons has been marked with all kinds of violence; an indifference about the simple cure of diseases; and a passion for operations, and all the excesses and horrors of surgery.—JOHN BELL.

The authority under which the new mode for removal of stricture of the urethra, by means of the perineal section, has been introduced, and the persevering efforts made to recommend its adoption, have induced me to bring under the notice of the profession the following cases, through the columns of your journal. It was my intention to have embodied them in a treatise, which I had advertised publishing on the subject; but, as circumstances have hitherto prevented me accomplishing this object, I consider it a duty, not less due to the cause of suffering humanity, than to myself, who have publicly taught and practised for so long a period a mode of treatment so totally different in its nature and results, not to withhold any longer the result of my experience on this very important department of operative surgery.

In my work on Practical Surgery, I have stated, that "the treatment of permanent strieture is by a series of silver catheters,"—that "neither the elastic gum, nor pewter catheter, nor bougie of these materials, wax, catgut, horse-skin, silver, German silver, or steel, or plated metal, ought to be used, and still less those with balls, caustie, or the lancetted stilettes;"—"that some advocate the division of the stricture by a subcutaneous incision; but that this mode of treatment is as dangerous as that by Stafford's lancetted stilettes. Of two patients that I have known treated in this manner, the one is said to have died of hæmorrhage, and the other to have been cured; *but the latter is afflicted with urinary fistula, and is, therefore, in a worse state than before the incision was had recourse to.*"

From a subcutaneous incision we have now advanced to a free perineal incision,—like the French, from *la petite operation, à la grande operation!* In my lectures on anatomy, as well as in those on surgery, I taught that the corpus spongiosum consisted of a congeries of arteries and veins, as first pointed out by the great Cuvier—that the corpus spongiosum was so highly vascular, that if the lithotomist wounded the bulb he must anticipate hæmorrhage, which, if neglected, would prove fatal; and that he must therefore secure the artery leading to the bulb, and stuff lint round the elastic gum tube. The importance of these facts was the more impressed on my mind, as I had witnessed, when a student, the corpus spongiosum intentionally wounded by the knife and gorget, and the patient die of hæmorrhage. What anatomist has not found the corpus spongiosum fully injected. by inserting one pipe into one of the internal pudic arteries? so that the mesial line cut into, will pour out as much blood as a wound in either lateral aspect.

The following cases are drawn up by a young surgeon of great promise. I interrogated and examined the patients also myself.

15th November, 1849.—E. M., aged 41, states, that about twenty years age, he fell from a scaffold eleven feet high, and struck his perinæum on a plank, causing great loss of blood, which flowed freely from the urethra. After this accident he began to experience difficulty in passing his urine, which gradually increased, and ended in stricture. In 1841 he applied to Professor Lizars, who put him in a warm bath, where, after remaining half an hour, he succeeded in inserting No. 2 silver catheter, which was retained for several hours, when No. 3 was inserted. The catheters were increased in size to No. 5, when the patient, considering himself cured, left off his attendance.

In 1848, finding the stricture as bad as ever, the patient consulted a *pure perineal sectionist*, who succeeded in inserting No. 3 catheter, but, after several trials to insert a larger catheter, he could never succeed; he therefore resolved upon performing the operation of perineal section. The patient was placed on the table, as in lithotomy, a staff inserted, and an incision made from the most depending portion of the scrotum to the verge of the anus, through the skin, cellular tissue, and urethra. The staff was now withdrawn, and No. 7 catheter inserted. A great quantity of blood was lost during the operation, which lasted upwards of thirteen minutes. Immediately after being placed in bed, hæmorrhage recurred to a fearful extent, and was with difficulty suppressed. In about an hour after, hæmorrhage broke out again, and was stopped. Towards night, bleeding again commenced, and was checked with great difficulty. The patient states, that by these repeated losses of blood he was much weakened.

Fourteen days after the operation, No. 9 catheter was inserted. In three or four months after, No. 8 only could be inserted. Soon after the operation, he was attacked with palpitation of the heart, which incapacitated him following his occupation and earning his livelihood.

He also states, that the stricture is as bad as ever; and, on taking off his trowsers to show the cicatrix in the perinæum, he was seized with palpitation of the heart, and compelled to lie down on a sofa for a few minutes.

In March, 1850, he consulted a physician, who gives the following account:—"E—— M—— is attacked with palpitation of the heart on any exertion, being seized with violent pain in the region of the heart, shooting to the left shoulder, and down the left arm to the fingers, all of which he ascribes to the hæmorrhage consequent on the operation. He has had no rheumatism, no inflammation of chest, no difficulty of breathing or cough, and none of his relations have had any heart disease. He has not been able to work since the operation. A distinct endocardial murmur is heard, obscuring both the cardial sounds. The carotids beat strongly and visibly, and there are no venous pulsations. The pulse is 84 and jarring."

He died in the beginning of August, 1850.

Case 1.—1st October, 1850.—J—— A——, aged 49, has been afflicted with stricture of the urethra for twenty years, for which he has been treated by the late Mr. Liston, Professor Lizars, Mr. Fergusson, and other surgeons. Mr. Liston with difficulty inserted No. 1 catheter, of the late M'Leod, cutler's guage, which the patient retained for three days, after which the size was progressively increased to No. 12, and then steel bougies were used, up to No. 11 of M'Leod. The patient considered himself cured; but, in the course of four years, he found himself so bad, that he became a patient of Professor Lizars, who was obliged to begin again with No. 1 of M'Leod, and gradually increase them to No. 8, when the patient considered himself cured, and left off his attendance. Eighteen months afterwards, he consulted a *pure perineal sectionist*, who at that time attempted to cure him with steel bougies, beginning with No. 1; but, at each attempt, considerable hæmorrhage and excruciating pain took place, and, when he *supposed* he had arrived at No. 6, the patient deserted him.

Two years after this, he became a patient of Mr. Fergusson, of King's College Hospital, who at once inserted No. 1 silver catheter, and soon increased the size to No. 5, when the patient left him, in consequence of family matters. Three or four years afterwards, the perinæum and serotum began to swell and alarm him, when he applied to a surgeon, who inserted No. 1 catheter, and shortly afterwards incised the perinæum, out of which flowed pus, blood, and urine. This surgeon ultimately succeeded in inserting No. 12 catheter.

Five years afterwards, the perinæum again became swollen, and burst with fistulæ in perineo, when he put himself under the care of a *perineal sectionist*, who incised the perinæum, applied poultices, and, in the course of a few weeks, inserted No. 2 catheter, which was retained for two days, and on the withdrawal of which, he attempted to insert a larger, but

failed. In the course of three weeks, he succeeded in inserting No. 3. and gradually up to No. 11. The patient was then told the disease would recur, and advised to submit to the perineal section, which was accordingly performed. After chloroform was administered, a staff, the size of No. 6, was inserted in the bladder, and the perineal section performed. Shortly after being in bed, hæmorrhage took place, when the steel staff was withdrawn, a search made for the bleeding vessels, which were secured, a silver catheter inserted, the wound plugged with lint, and compresses and bandage applied. In three days after this, the dressings were removed, and the catheter withdrawn, poultices applied for three weeks, when No. 5 catheter was inserted for half an hour, and repeated twice a week for six weeks, until No. 11 could be inserted, when he considered himself cured, which may be about three months ago. Since then, the disease has so relapsed, that he is obliged to let down his trowsers (the same as if he were about to relieve his bowels) before he can get relief from his bladder, the urine flowing almost entirely by the wounds in the perinæum, only a drop or two passing by the external meatus. On examining the perinæum, it is found to consist of numerous fistulæ and large cicatrices.

Case 3.—10th October, 1850.—F—— R——, aged 24, first observed difficulty in passing his urine in May, 1849. After several attacks of gonorrhœa, an abscess took place in the perinæum, which was incised; but, during his recovery, he contracted again gonorrhœa, so that some months elapsed before the insertion of a catheter could be attempted. No. 3 was easily passed, and the size gradually increased to No. 11. A recurrence to his irregular habits, however, soon brought on irritability of his bladder, which prevented the continuance of the catheter. Last February, he consulted a *pure perineal sectionist*, who, in the beginning of March, 1850, after administering chloroform, incised his perinæum, and plugged the wound with lint, and applied a compress and bandage. Next morning, after the operation, the patient found his bed, which consisted of three mattresses, as also his shirt, soaked with blood, and was told that he had been bleeding the greater part of the night. The dressings were removed, and fresh lint and bandage applied. About a week after the operation, No. 5 bougie was inserted, and immediately removed, and in three weeks afterwards, repeated. He continued under treatment for seven months, and states, that on each insertion of the bougie he bled freely. This day, 15th October, 1850, his perinæum presents a number of fistulous openings, through which nearly all the urine flows. On being laid on a sofa, Professor Lizars inserted No. 7 catheter with comparative ease.

Case 4.—18th June, 1850.—D—— S——, aged 29, has all the symptoms of stricture of the urethra, and states that he underwent the operation of perineal section in August, 1850, and that he lost a considerable quantity of blood, having bled for nearly forty-eight hours after the operation. States that he has lost the power of propelling his urine, the stream falling perpendicularly to the ground. The cicatrix of the perinæum is between three and four inches long. The patient being laid on a sofa, Professor Lizars inserted No. 6 catheter with some difficulty.

Every unprejudiced inquirer, who peruses the history of the preceding cases, must come, I am satisfied, to the conclusion—after considering the period occupied in the performance of the perineal section, the great loss of blood during and after the operation, and the subsequent recurrence of the stricture—that the new mode proposed to supersede the old one, which consisted simply of dilatation, by means of the silver catheter, is not only a painful, but an extremely hazardous, as well as unsuccessful, and therefore uncalled for substitute. Neither the want of manual dexterity in passing an instrument through the stricture, nor the alleged notion that frequent attempts to do so have the effect of injuring and irritating the excitable state of the urinary passage, afford any just ground for resorting to so dangerous an experiment. The circumstance that an instrument was passed into the bladder in each case before incising, incontestably proves, that no necessity whatever existed for enlarging the contraction by means of an external opening. In conclusion, I have only to add, that in every case where perineal section has been had recourse to, a cure by the silver catheter might have been effected in three or four weeks, with as reasonable a prospect of non-recurrence of the stricture. For I believe it will be found, that the recurrence of the stricture will take place, according to circumstances, as rapidly and certainly after the one mode of removal as the other, and that nothing but the timeous and persevering use of the silver catheter can be safely depended upon for affording relief. The case of E— M—, and that of J— A—, treated by dilatation by Mr. Liston, Mr. Fergusson, and myself, strongly attest the correctness of this opinion; in further corroboration of which I shall soon submit to the profession a series of cases, of a more obstinate character than those I have just described, of stricture of the urethra, and fistula in perineo, which have been cured within a month by dilatation, unaccompanied by any other means.

I have heard the late Mr. Liston, upon very important occasions, declare, and I remember, in a very critical case, where he had been several times foiled in inserting the catheter, but eventually succeeded by perseverance, that incising the urethra was altogether unnecessary, and that he had never failed in passing the catheter in stricture, and that he considered all other modes of treatment barbarous.

Edinburgh, 38, Charlotte-square, Oct. 19, 1850.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

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[Continued from page 407.]

TWELFTH PAPER.

NATURE OF TYPHOID FEVER.

What is that deviation from normal structure or function which is essential to the existence of typhoid fever? Peyer's patches are invariably found diseased after death; but then, as has been previously observed, their lesion may be the result, invariable indeed, but *still the result* of some general disease bearing only the same relation to the fever that the small-pox pustule does to the general disease or fever termed small-pox—the latter is the essential, the primary affection; the former, *i. e.*, the local lesion, an accident.

Now some (as Cruveilhier) have considered the disease of the agminated glands as the essential, the primary affection; the general phenomena as secondary to the local lesion.(a) This opinion rests chiefly on two grounds:—

1st. That the lesion is invariably present. To this argument, the answer is, the identity in this particular between the small-pox pustule and the intestinal lesion of typhoid fever; and that, as in the former, the invariable sequence, *i. e.*, the pustule, is not regarded as a cause; so in the latter the invariable co-existence of the lesion and the general symptoms does not prove that the general symptoms depend on the lesion.

2ndly. That the abdominal symptoms are frequently those first developed; that pain in the belly is often the first symptom; and that, if a patient die ever so early in the disease, lesion of the agminated and mesenteric glands is constantly found. But to prove that lesion of function, or of structure of an organ, is even invariably the first of a series of morbid phenomena, is by no means to prove that those which follow are the effect of the first.(b) Does the fact that lesion—inflammation?—of Peyer's patches occurs as the first symptom prove that typhoid fever is merely a species or variety of enteritis? Certainly not; for if the occurrence of sore throat anterior to the general symptoms of scarlet fever be not a proof that the general symptoms—including the eruption—of scarlet fever depend on the inflammatory affection of the throat, no more can the general symptoms—including the rose spots—of typhoid fever be considered—*i. e.*, necessarily—to be dependent for their origin on the intestinal disease; and this argument has the greater force, when we remember that sore throat pre-

(a) Louis has been incorrectly stated to hold this opinion.

(b) The invariable antecedent of any given event is not necessarily its cause. Invariable antecedent and invariable consequent are not synonymous with cause and effect.

eedes the general symptoms—rigors included—of scarlet fever *infinitely* more frequently than diarrhœa or abdominal pain precedes the general symptoms of typhoid fever.

It will be observed, that I have not here used an argument drawn from analogy—a line of argument which has too often been the bane of medicine—to prove that typhoid fever is a general disease; but have only urged, that the same mode of reasoning should be used in considering the relation supposed to exist between the local lesion and the general symptoms of two analogous diseases.

Now, as a positive argument against the view that the general symptoms of typhoid fever are dependent on the intestinal lesion, it may be urged, that the former bear *no relation* in severity to the extent of the latter. (a) The tongue may be moist and almost clean—the mind clear—the general strength comparatively little impaired, as in the cases of Jane H. and Peter A., and yet the intestinal lesion be most extensive; or the intestinal lesion may be trifling, and every other organ healthy, so far as the scalpel enables one to determine their condition, and yet the tongue be dry and brown, the delirium constant, the prostration extreme: see the subjoined case of Walter B. This want of relation between the local and general symptoms is sometimes observed in scarlet fever. Thus, I have seen a strong man die in scarlet fever when the throat affection was of the most trifling description, and the scalpel laid bare no serious lesions.

What I especially desire to impress on the reader is, that I do *not* argue, that because sore throat precedes the general symptoms of scarlet fever,—and yet we allow that the latter are not dependent on the former,—*therefore* the general symptoms of typhoid fever are not dependent on the intestinal disease; but what I *do* maintain is, that if the fact that the general symptoms of scarlet fever are preceded by the sore throat, *i. e.*, by a local lesion, does not prove that the former depends on the latter, then the simple fact, that the intestinal lesion precedes the general symptoms of typhoid fever, cannot be regarded as proof that the one depends on the other,—that they stand in the relation to each other of cause and effect,—and that, *moreover*, as the want of coincidence between the severity of the throat disease and the general symptoms of scarlet fever is held to be the cogent argument in favour of the non-relation of the two, so must the want of coincidence between the intestinal lesion and the general symptoms of typhoid fever be held to be an *equally* cogent argument in favour of the non-relation of those two. I plead not, that what is true of the one disease should be held to be true of the other; but that, in reasoning on the causative value of the chronological relations between the local lesion and the general symptoms, we should adopt the same line of argument in the two diseases.

My own impression is, then, that the intestinal disease bears the same relation to the general symptoms and to the essential deviation from function or structure in typhoid fever, that sore throat does to the general symptoms and to the essential deviation from function or structure in scarlet fever. In both the first notice of the poison having entered the system, or of the morbid condition of the blood, the vascular system, or nervous system (whichever it may please the reader to prefer) having been established, is manifested by that organ, which is the most susceptible to the influence of the diseased condition, or to the action of the poison; that which determines whether headache or diarrhœa or sore throat shall be the first symptom being the variation which exists in the degree of susceptibility of different organs in different individuals.

Case 36.—In a man aged twenty-two years, after four months' residence in London. Pain in the abdomen—frontal headache—rose spots—sonorous râle—epistaxis—delirium—dry brown tongue—slightly relaxed bowels—sudden intense pain in the abdomen—followed by rigors—chilliness—general abdominal tenderness—death on the 24th day of disease. Twenty-two hours after death—bronchial mucous membrane injected—extreme vascularity of peritoneum—recent adhesion of folds of ileum—turbid fluid in peritoneal cavity—perforation of ileum—ulceration of Peyer's patches softening of mucous membrane of cœcum and colon—mesenteric glands enlarged—spleen large—other organs healthy.

Walter B., a strong well made man, 5ft. 11in. in height, and measuring 16in. across the shoulders, of fair complexion, light hair and eyes, aged 22, a policeman, was admitted into the London Fever Hospital, August 17, 1850, under the care of Dr. Tweedie. His health, up to the date of the commencement of his present illness, had been very good. He had lived in London four months only, and resided during that time at Rotherhithe station-house. On Saturday, August 10th, he was seized with pain in the abdomen and frontal headache. His bowels were confined till he took an aperient. He left duty Wednesday, August 14th, and took to his bed the day before his admission. At no time since the outset had he had rigors.

A few hours after his admission I made the following notes:—

August 17th, 8th day of disease. No headache; some vertigo; mind clear; expression nearly natural; slept well last night; pupils large; conjunctivæ pale; bad taste in the mouth; states that any noise is offensive to him.

He rode this morning in an omnibus, from Rotherhithe to King's Cross, and then walked from King's Cross to the hospital.

Tongue moist, large, red at edges, elsewhere covered with thick, dirty-white fur; no stool to-day; no appetite; much thirst; no fulness, resonance, tenderness, nor gurgling in abdomen. Pulse 84, soft; trifling cough; a little sonorous râle generally over the whole chest.

Skin warm and dry. About 100 rose spots on the anterior surface of the abdomen and thorax.

On the next day his tongue was nearly clean; and, although he had taken a teaspoonful of castor oil, his bowels only acted once. There was little alteration for the two following days, except that on both he sweated very freely, and passed two relaxed stools.

On the 23rd of August, *i. e.*, 14th day of disease, I noted:—

"Pulse 96, soft; *muscular movements* very tremulous; sweated freely yesterday afternoon; no miliary vesicles; several fresh rose spots; tongue moist, furred, white, *very tremulous;* two relaxed stools; gurgling in the right iliac fossa; no tenderness, abnormal fulness, nor resonance of abdomen."

Although the muscular movements were very tremulous on the 24th of August, yet he sat up in bed, when bid, with facility. He continued to sweat occasionally. The pulse continued 96. In the evening he lost about 8oz. of blood from the nose, and subsequently became delirious.

On the 25th of August, the 16th day of disease, the delirium continued, the muscular tremor had increased, and his tongue was dry in the centre. He had no stool. On the following day I noted as follows, 17th day of disease:—

"Pulse 96, soft; face flushed; tongue dry, brown, and very tremulous; abdomen moderately full only; no abnormal resonance, no gurgling; characters of rose spots unequivocal; position dorsal, legs freely extended; slept better than the preceding night, but was delirious when awake; did not attempt to quit his bed.

On the 18th day, he continued in much the same state. He passed one stool only.

On the 29th of August, the 20th day of disease, his pulse was 120, weak; he was reported to have slept much night and day, but was readily aroused; had passed one relaxed stool.

On 30th of August, 21st day of disease, the following note was made:—

Pulse 108; mind confused, no idea how long he has been in the hospital; conjunctivæ pale, pupils large; general muscular tremor so great that he articulates imperfectly and with difficulty; position dorsal, legs fully extended; cheeks flushed; tongue dry, brown, and fissured; has passed two watery stools the last twenty-four hours. No fulness, abnormal resonance, nor tenderness of abdomen; no gurg-

(a) I am quite aware that it has been argued, that in some cases of pneumonia there is no relation between the extent of the local lesion and the severity of the general symptoms. There is, however, less force in this argument than might at first appear, and for this reason, that a man who has simply diagnosed the existence of pneumonia, and mapped out its extent, has done but little towards proving what is the disease under which his patient labours. Primary pneumonia must be separated from secondary pneumonia, idiopathic inflammation from that coincident with old-standing disease, as Bright's disease, and *from that set up during the progress of febriculæ*. In the latter case the general symptoms most severe may have preceded the local lesion, and be out of all proportion to it; in the former case, the general symptoms, influenced doubtless by the condition of the blood, may be trifling, so that when cases *like* these are cut out from the list of pure pneumonias, then I suspect there will be found (if similar ages be alone considered, and similar forms of anatomical lesion) a general relation between the extent of the local lesion and the severity of the constitutional symptoms, at least no such discordance as unquestionably exists between the two in scarlet and typhoid fevers.

ling; skin hot, damp; no miliary vesicles; rose spots numerous and well marked; some redness of the cutes covering the sacrum.

He lay quietly and appeared quite easy from the time of my visit until eleven p.m., when the nurse left him asleep. About half-past one a.m., the night-nurse reported, that he awoke complaining of violent pain at the lower part of the abdomen. She reported, that "he cried dreadfully, and said the pain was so violent he did not know what he should do." He then complained of sense of cold; he shivered, and his skin felt considerably below the natural temperature to the nurse. He was at the same time covered with "a cold sweat." A blanket was placed on the bed, a hot bottle to the feet, and the abdomen fomented with hot water. From these he appeared to experience relief, and fell asleep about five a.m. At 7 a.m. he awoke; and then complained of pain, and there was great tenderness of the abdomen. Hyd. chlorid. gr. j., pulv. opii. gr. ¼ in pill was given at 10 a.m., and repeated at noon. From 2 till 4 p.m. he slept quietly; on waking, he left his bed to dress himself, fancying it was morning.

At 5 p.m. I saw him, and noted as follows:—

Pulse rapid and feeble; was awake when I entered the ward, ten minutes since—is now dosing, taking a little in his sleep; lies constantly on his back, with his legs fully extended; expression rather worn; face pale, conjunctivæ pale, pupils natural; tongue dry, covered with a thin, rough, yellowish fur, fissured, red at the tip and edges. He passed two stools while in so much pain, early in the morning, and one about ten o'clock; the last was liquid, consistence of the others not ascertained; no nausea; no vomiting; abdomen hard, parietes retracted, decidedly tender over its whole extent; tenderess greatest in the hypogastric region; a blister has formed spontaneously on the spine of the right ilium. Complains of pain in the abdomen when he coughs, but not as he lies quietly. No sense of chilliness; surface generally of normal temperature; hands rather livid and cool. Many well-marked rose spots on abdomen and thorax.

℞ Tinct. opii, ♏xx.; aqua, ʒss.; M. ft. s.; pulv. opii., gr. j. 4tis qq. horâ s.

He died at 2 p.m., August 31st, *i.e.*, the 22nd day of disease. I did not see him after making the foregoing notes. But from the nurse, an intelligent woman, I received the subjoined report. He slept from 7 p.m. till 10 p.m.; and during the night, at intervals, for half an hour; to-day he has dozed frequently, but not more than five minutes at one time. Although, to the very last, he answered questions rationally, yet every now and then his mind wandered. He never complained of pain in the belly, except once slightly this morning, just after drinking a little warm tea. He lay constantly till he died in the position in which I saw him, *i.e.*, dorsal, with legs extended. His hands continued as yesterday, livid and cool and clammy, and to-day his face was rather purple. There was no return of the rigors, and he did not complain of feeling cold. But when, on one occasion, the nurse's hand touched him, he said, "How cold your hand is." Really it was not so. The nurse did not observe his belly to be swollen when she changed the poultices, application of which appeared to afford him satisfaction.

The body of Walter B. was examined twenty-two hours after death; the weather moderately warm. The following notes were made:—

Cadaveric rigidity strongly marked; moderate congestion of the posterior surface; abdomen full and resonant; very little fat on the abdominal or thoracic parietes; *brain* and *meninges* in every respect normal; a small, non-adherent, colourless clot in the superior longitudinal sinus; arachnoid transparent; no abnormal vascularity of pia mater; rather more transparent colourless serosity beneath the arachnoid than usual, but not enough to raise that membrane from the gyri—the latter are rather narrow, and the anfractuosities rather broad; about half an ounce of colourless transparent serosity in the lateral ventricles, and as much at the base; the colour and consistence of the brain substance natural.

The *larynx*, *pharynx*, and *œsophagus* were not examined, (the friends objected to the body being disfigured.)

Pericardium contains very little fluid.

A firm yellow clot filled the right auricle and ventricle; a smaller one lay in the left cavities. The substance of the *heart* firm, healthy in appearance; valves normal.

No adhesions; no fluid in either *pleura*. *Lungs* models of health; pale and crepitant.

Bronchial Tubes.—Lining membrane considerably injected with blood. Opened to third divisions.

Bronchial glands not visible.

Peritoneal Cavity.—External surface of stomach abnormally injected. Great omentum highly vascular, bright scarlet, especially its lower portion or free edge, and part adjacent, which latter are also covered with pulpy yellow lympho-purulent matter. About thirteen ounces of dark turbid dirty-looking fluid, with shreds of lymph in it, removed from the peritoneal cavity. Penetrating the coats of the ileum, about three inches above the ileo-cœcal valve, and through that portion of the intestine opposite to the mesentery, is an aperture about the size of a small pin-head; turbid gruelly-looking fluid can be pressed from the intestinal canal through the opening referred to. Some soft lymph coats the peritoneal covering of the intestine, here and there in the vicinity of the aperture, but there are around or adjoining it no adhesions. Just above it, however, are three folds of the ileum, adherent to each other. These adhesions are readily broken down. There is no second perforation. The portion of the intestine in which the aperture is found, hung, when the abdomen was open, into the pelvic cavity. The peritoneum covering the lower part of the ileum is either deep red or vivid scarlet. The redness, to the unassisted eye, is uniform at places, but even there a lens shows it to be really capillary. The vessels of the peritoneal surface of the bladder, and of the anterior wall of the abdomen, are finely injected with blood. The under surface of the great omentum is decidedly more vascular than the anterior surface.

Stomach moderately rugose. The mucous membrane is pale, excepting that of the fundus, which is of a deep yellowish-green colour; it is mammillated from the fundus to two in. from pylorus. The consistence of the mucous membrane is good. Strips from half an inch to three-quarters of an inch obtainable.

Duodenum. Mucous membrane deep yellow; otherwise healthy.

Jejunum and Ileum.—The mucous membrane of the jejunum and upper part of ileum pale, of normal thickness and consistence. About 42 in. above the ileo-cœcal valve, on one of Peyer's patches, are two ulcers 1-5th of an inch in diameter; their edges dull red; their floor submucous tissue pale, or faintly streaked with red. The whole patch is slightly thickened and opaque; there is no deposit in the submucous tissue of the gland. On the next patch, descending to the ileo-cœcal valve, is a pale, opaque, thickened spot, ¼ in. in diameter; then follow three patches, on each of which is an ulcer 1-5th of an inch in diameter, with deep red edges. Then comes the patch next save one to the ilio-cœcal valve, through which the perforation had occurred. On this large patch, which is over its whole extent somewhat thicker than usual, but offers no deposit in any part of its substance, are five irregularly striped small ulcers, their floors transverse muscular fibre; the whole patch is rather redder than the surrounding membrane. The perforation has taken place through the centre of an ulcer seated on the centre of this Peyer's patch; the edges of the aperture are bounded by a few shreds of sloughy-looking yellowish-white substance. The ulcer through which the perforation has occurred is half an inch in length and a quarter of an inch in breadth; its floor is formed of transverse muscular fibres of a deep red colour; the perforation is as near as may be in the centre of this ulcer. The Peyer's patch immediately above the ileo-cœcal valve is thickened as in others, from the swollen state of the mucous and submucous coats, and not from any deposit in the latter. On it are three or four ulcers, neither exceeding one-fifth of an inch in diameter; their floors are formed of submucous cellular tissue. The lower six inches of the ileum is somewhat more injected than usual, the redness being capillary.

Cœcum and *Colon.*—Mucous membrane generally extremely soft, no strips obtainable; no ulceration; no enlargement of the solitary glands.

Mesenteric glands—corresponding to the whole length of the intestine—slightly enlarged; about the size of peas and beans, but flat; they are flabby and purple.

Pancreas pale and healthy.

Liver healthy in colour; flabby. *Gall bladder* moderately distended with thin yellow bile.

Spleen large, dark, soft, flabby.

Kidneys.—Capsules separate readily; healthy in all respects.

Urinary Bladder.—Mucous membrane pale; healthy.

Early in the morning of the 21st day, perforation of the ileum took place; in thirty-seven hours the man was dead. The symptoms were sufficiently well marked for the diagnosis to be made, and the prognosis given with confidence. This man, like John P., lay on his back, with his legs fully extended, although his peritoneum was intensely inflamed. Nor were the man's senses blunted to an extent sufficient to account for the slight pain he suffered. He enjoyed the taste of the tea he drank on the morning of his death, telling the nurse that it was better than ordinary—a fact, as it was distinct from the other patients and stronger than usual. It is worthy of remark, that Walter B. walked on the 8th day of disease from King's Cross to the Liverpool-road, Islington, a distance of a mile,—a most fatiguing walk, as he had to ascend the long and steep Pentonville hill. I never saw the same degree of muscular power in a severe case of typhus fever at the commencement of the second week. By the 16th day he was very delirious night and day; his tongue was dry and brown, and the prostration was extreme; yet, when he died a week after, *i. e.*, on the 22nd day of disease, the amount of intestinal or mesenteric disease was really trifling when compared with that present in Jane H. or Peter A. The ulcers were very small, quite insignificant, with the exception of the one through which the perforation occurred, and that would have been harmless but for its depth at one little spot.

Excepting the intestinal canal, mesenteric glands, and peritoneum, every organ was healthy. The peritonitis was of course set up subsequently to the occurrence of delirium, brown tongue, and prostration.

As to the softened state of the mucous membrane of the large intestine, I am inclined to consider that, in the case of Walter B., it was in a great measure cadaveric. The colour of the softened membrane was neither red nor grey, nor had it that granular appearance comparable to a mixture of flour and cold water, which characterises mucous membranes softened from inflammation. It is interesting to observe, that the delirium, &c., set in directly after he lost 8 oz. of blood from the nose. Blood-letting is never required in fever because delirium occurs, however violent that may be. The large proportion of fibrine in, and the firmness of the clot found in the heart after death, was probably to be explained by the presence of the peritonitis. The spleen was enlarged.

Pregnancy.—Rokitanski says, "Pregnancy offers an almost entire immunity from typhoid fever." My experience is by no means in accordance with that of the celebrated Vienna pathological anatomist's, and I know others have repeatedly met with examples of women large with child suffering from typhoid fever. Pregnancy is a very serious complication. A *very* large proportion, I will not say all, of such cases die. Last winter I exhibited to the members of the Pathological Society the intestines of a woman who died on about the 12th day of typhoid fever. She was seven months gone with child.

In my next paper I proceed to consider the influence of age on typhoid fever.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By DR. BARCLAY,
Medical Registrar.

SCIRRHUS OF THE PYLORUS — ULCERATED OPENING, FORMING A FALSE PASSAGE FROM THE STOMACH TO THE SMALL INTESTINE.

Mary G——, aged 35, admitted into St. George's Hospital 28th August, 1850, under the care of Dr. Nairne; a married woman, who has had three children, and a miscarriage two years ago; the catamenia have been absent about a year and a-half. Her illness was described as having commenced soon after this occurrence, but it was not until six or seven months subsequently, or about a year before her admission, that she had discovered a hardness in the region of the umbilicus, which had latterly assumed the characters of a distinct tumour, accompanied with a good deal of pain and tenderness. During the whole period the bowels had been much relaxed, and for nine weeks past she alleged that she had been passing blood and matter, but she believed herself to be suffering from piles. It was also subsequently ascertained, that about three years ago she was seized with sudden sickness, and brought up, by vomiting, about a pint of dark-coloured and partly coagulated blood, which was said to have had an offensive smell; and, for some days following, black, pitchy motions were passed.

On admission, she was much emaciated, had a sallow aspect and an anxious expression; a quick feeble pulse, a glazed and somewhat aphthous tongue, and hot skin. She complained of thirst, and that her mouth was, especially at night, hot and burning; the bowels were relaxed, and she was said to have some cough. Nothing, however, indicated disease of the chest; but, on examining the abdomen, a firm tumour, with a pulsating movement, was found above and somewhat to the right of the umbilicus, but not extending towards the right hypochondrium, and evidently not connected with the liver. It was hard, resisting, and immoveable; and a little examination served to show, that the pulsation was only communicated from the aorta behind, and was much increased by pressing it backwards against that vessel. Dulness, on percussion, extended from the region of the tumour towards the left iliac region, in which direction the abdomen felt firmer than in any other, but no distinct prolongation of the tumour could be felt in any direction. The tumour was somewhat tender on pressure, and was said to be at times exquisitely so. She was ordered a draught, to be taken three times a day, composed of 4 drs. of the hospital spermaceti draught, 6 drs. of camphor julep, and 15 grs. of aromatic confection; she was allowed 4 oz. of red wine daily, and beef-tea and other nourishment as she could take them.

30th.—The bowels continue acting frequently, and the motions are considerable in quantity, and dark and offensive; a little bloody mucus has been observed on one or two occasions, but nothing else of importance. The tumour is more painful, preventing her from sleeping, and she complains of a sense of burning in her throat, and constriction across the chest. The tongue has become of a very bright red, and is much more aphthous. Pulse 96, weak. She was ordered to use the honey of borax as an application to the interior of the mouth, and to apply sinapisms to the chest; and next day, 20 minims of liquor potassæ, and 15 drops of the comp. spir. of sulph. ether were ordered in her draught, in place of the aromatic confection; while she was to take 3 drs. of castor oil next morning, to unload the bowels, which was repeated on one or two mornings following.

Sept. 3rd.—She is decidedly more emaciated. The tongue is better, but still red and raw-looking. The abdomen is generally tender, and the tumour is very prominent, and feels more lobulated. She has no sickness or vomiting, and the appetite is pretty good. A large quantity of thin fæces have been brought away by the oil. To continue the treatment.

6th.—Pulse 112. Bowels open; motions again very offensive. She has been rather restless for one or two nights past, and has had an ether draught, with 10 minims of laudanum, at night; and, as the bowels were not freely open, she had a dose of house-medicine this morning. She is now ordered to have 3 drs. of castor oil, with 4 minims of laudanum, in peppermint-water, to-morrow, and to continue the draught.

9th.—She is becoming evidently lower and weaker, emaciating from day to day, but the appetite continues good. Not much change has occurred in the tumour. The bowels continue inclined to be relaxed; tongue very red, and becoming again more aphthous. She complains of sore throat and difficulty of swallowing, but has no sickness. To continue.

12th.—Last evening a low form of erysipelas appeared on the nose. She is very low, and seems to be sinking, the pulse having become feeble and rapid. She is afraid of dying in the hospital, and is determined to leave.

She left the house very soon after the hour of visit, and, being followed to her home, it was ascertained that she gradually sank, and died on the evening of the 13th.

Permission to make a *post-mortem* examination was obtained with great difficulty, and only on condition that it should be confined to the abdomen. It was performed by Mr. Holl, curator of the museum, about sixty-five hours

after death. The pyloric extremity of the stomach was considerably thickened by a deposit of scirrhous matter in its coats, and was firmly adherent to the anterior wall of the abdomen, immediately above the umbilicus, where it formed a small hard tumour, corresponding to that which had been observed during life. The deposit completely surrounded the valve, which was nearly closed, scarcely admitting the point of the little finger, and extended backwards about an inch and a-half, but did not encroach upon the duodenum. The inner surface was very rough, and presented a warty, irregular appearance, and, at its lower part, an ulcerated opening, of about the size of a shilling, formed a communication between the stomach and a convolution of the upper portion of the jejunum, which was adherent to the outer wall of the stomach at this point. The stomach presented nothing else remarkable, and the other viscera were healthy.

The chief point of interest in this case is the circumstance that the perforation of the stomach permitted the ordinary functions of nutrition, to a certain extent, to proceed unimpeded by the obstruction at the pylorus. In consequence of this, the nature of the disease was rendered more doubtful during life by the absence of its chief feature in ordinary circumstances, viz., constant vomiting; and, although an attack of hæmatemesis had occurred in the commencement, there had been no recurrence of it, nor any of the grumous, coffee-ground vomiting, which is seldom wanting at some stage of its progress.

The position of the tumour entirely obscured its true relation to the viscera, although the state of cachexia and gradual emaciation led to the belief that the growth was one of malignant character. The appearance of the tongue, and the presence of diarrhœa, were such as are more commonly associated with ulceration of the lower part of the intestine, but were, in this case, perhaps due to the same condition existing in the stomach itself, as well as to the general cachexia, arising, not so much from any deficiency or imperfection in the nutritive functions, as from the gradual contamination of the fluids of the body, which might equally have accompanied scirrhus of any other portion of the body.

No history was elicited to show at what successive periods the events had occurred, of which evidence was found on *post-mortem* examination; and we are left solely to conjecture how the stomach had acquired the peculiar position which brought it into contact with the small intestine, and favoured the reparative process of ulceration and perforation; as we are ignorant of the causes of that inflammation and adhesion which had prevented the extension of its contents into the peritoneum, and, thus opening a channel of communication between the stomach and intestine, had undoubtedly tended much to prolong the patient's existence.

KING'S COLLEGE HOSPITAL.

BY
HENRY SMITH, Esq., F.R.C.S.,
(Formerly House-Surgeon to the Hospital.)
AND
BY ROBERT C. R. JORDAN, Esq.,
House Physician.

TYPHOID FEVER.

THE following case of fever, under the care of Dr. Todd, may be taken as an example of the epidemic, which appears, judging from the numerous cases lately brought into this hospital, to have been very prevalent. It may prove interesting to the readers of the *Medical Times* for two other reasons; firstly, as illustrating the styptic properties of the spirits of turpentine, a remedy to which Dr. William Budd has lately in these pages recalled the attention of the profession, and which we have had many opportunities of trying in similar cases, and always with decided benefit; and secondly, on account of the very valuable papers on Fever, now in the course of publication in this periodical by Dr. Jenner. The most remarkable features which have characterised the epidemic throughout have been the co-existence of severe bronchitis and diarrhœa, accompanied by more or less of hæmorrhage from the bowels; and, in the only fatal case, the *post-mortem* examination revealed, as might have been anticipated, extensive ulceration of Peyer's patches in the lower portion of the ileum.

John Bigg, aged 15, was admitted as an in-patient into King's College Hospital, under the care of Dr. Todd, on the evening of the 3rd of Sept., 1850. He was then not quite coherent, his friends stated that he had complained of being cold, and shivered five days previously, since which he had suffered much from headache, languor, and excessive thirst. For this he had had leeches applied to the temples, and had been otherwise antiphlogistically treated. His face was much flushed when admitted; the skin was dry and hot, but the tongue was moist and not much furred; pulse 94, and of moderate strength; respirations 34; rhonchus and sibilus audible over the whole chest. He only complained of pain in the head, and of excessive thirst. The pupils were unequally contracted, the left being half as large again as the right; this last symptom was, however, immediately discovered to arise from an old adhesion of the iris on the right side, and it is mentioned here simply as a word of caution to the younger student.

He was ordered ammon. s. carb., gr. iij.; mist. ammon. citratis, ℥j., 6 tis. horis.

Low diet; strong beef-tea, o. ij.; wine ℥ij. in the day.

Sept. 3rd.—Became delirious in the night; pulse 112; more feeble; wine ℥ss. every three hours. In the morning his nose bled freely several times; diarrhœa also came on, and his strength was much prostrated; the wine was therefore increased at noon to half an ounce every hour, and he was ordered to take chloric æther ℥ss., tincture of krameriæ, ℥ss., mucilage ℥ij., and water sufficient for an ounce and a half draught every four hours.

Vespere.—Pulse 122; respirations 28. The sibilus rather less marked. He is now quite delirious, and it is difficult to keep him in bed; his face is much flushed, and he complains much of headache; the tongue is red and dry, with the exception of a line of yellowish fur running down the sides; the skin is hot and dry; urine rather acid, of specific gravity 1·015, slightly high coloured, containing a minute quantity of albumen, no doubt from the presence of blood, though, unfortunately, no microscopic examination was made. The epistaxis has not returned since the early part of the afternoon. The bowels are still loose, but he has passed no blood with the motions. Wine increased to ℥xvj. in the twenty-four hours.

Otherwise to continue treatment.

Sept. 5th.—A number of rose-coloured spots about the size of a large pin's head are scattered over the chest. The epistaxis has returned, but not much blood has been lost. He has been delirious all night, and has not slept at all. The purging still continues. The pulse is 109 more feeble; the respirations 35.

Ordered an enema, with twenty minims of laudanum and two ounces of starch, to be given directly.

The injection was retained well, and after it he seemed better; but, suddenly, in the afternoon, he lost about a pint of blood by stool. For this, ten minims of the spirits of turpentine were ordered to be added to every dose of the mixture, which was still to be taken every four hours.

Vespere.—In every way worse; he is much prostrated; the delirium is no longer violent and active, but of a low muttering kind,; urine of sp. gr. 1·020, still containing a small quantity of albumen.

Brandy to be substituted for the wine—℥xvj. in the twenty-four hours; beef-tea to be made stronger—lb. jss. of beef to the pint; pulv. ipecac. co., gr. v., hâe nocte sumend.

6th.—The face is less flushed, and mouth less covered with sordes; the tongue is still very dry; during the night the fæces and urine were passed under him in the bed, but this morning he called to the nurse just before passing his water. He has slept much since taking the Dover's powder. Early in the morning he had another starch and opium enema as before, the diarrhœa still continuing; there has also been a small quantity of blood passed with every motion.

Vespere.—Diarrhœa continues, but the stools now contain no blood. The pulse is 150, very feeble and fluttering, the heart's impulse is, however, stronger than might be expected. The respirations are twenty-five, and the sibilus is much diminished. The spots are far more numerous on the chest than when they were first noticed; there are also some on the abdomen.

Continue treatment. The patient takes his stimulus and nourishment well.

7th.—There has been no blood in the motions, and no albumen in the urine. When questioned, he complains of pain in the belly, but there is no tympanitis. The bowels were only open twice in the twenty-four hours. The patient

seeming drowsy, the enema was repeated without the laudanum. The pulse is 120; the respirations twenty-eight. The mouth is much less coated with sordes; the tongue is, however, still brown and dry; the skin is cooler, and the face less flushed; the patient also seems less delirious.

Ordered:

Mist. c. sp. terebinth, ℳvj.; sp. æth chlor., ʒs.; tinct. krameriæ, ʒss.; p. trag. co. q. s.; inf. catechu, ℨiss. omni horâ sumend.

8th.—Tongue much moister and less brown; skin cooler, and almost damp. He moans much, and apparently suffers much when the abdomen is pressed. For this he was ordered the outward application of turpentine, and he had five stupes on in the course of the day, from which he evidently derived much relief. The spots are now numerous on the abdomen and thighs, as well as the chest. The diarrhœa has returned to-day, and the pulse is weaker; he, however, does not always lie upon the back, but occasionally shifts from side to side.

Vespere.—Not quite so well. The tongue is again red and dry; the manner more restless and more delirious; he chatters constantly in an incoherent manner, and is picking at the bedclothes. The pulse is very feeble, 109; respirations 34.

Brandy ℨj. every hour, ℨxxiv. in the day. Otherwise continue treatment.

9th.—The bowels have been loose several times in the day, but no blood; he was ordered for this another starch and opium enema as before. The tongue is again dry and horny; the patient will not put it out when asked; and it seems as if he did not understand what was said to him. He is more stupid, but less delirious. The pulse is 114, and the respirations 24. He still moans much when pressure is made on the belly.

Continue treatment.

10th.—The respiration is more difficult, and the sibilus has much increased; turpentine stupes were therefore ordered to be applied to the chest frequently. Spots have appeared on the arms, but few in number. The bowels have been loose in the night. The tongue is yet dry, and the mouth and teeth coated with sordes. An enema of starch and laudanum was given early in the morning. He seems now to have very little abdominal pain or tenderness.

11th.—Is less delirious, and, at times, even speaks rationally. There is to-day a little blood again in the stools. The dose of the spirits of turpentine was therefore increased to ten minims. He is now taking:—Sp. terebinth, ℳx.; tinct. krameriæ, ʒss.; sp. æth. chlor., ʒss.; p. trag. co., q. s.; inf. catechu ad ℨiss. Omni horâ.

12th.—Pulse 114, respirations 28. Pulse more feeble; the skin is, however, less hot. The purging still continues, but less than yesterday, and no blood. The cough is better; he has slept quietly, and now lies upon one side.

From this time, the patient gradually improved in all respects, so that, on the 24th, his pulse was only 84, and his cough had ceased

He is now (Oct. 1st.) well, and almost ready to be discharged.

Physician's Charges.—Dr. Pritchard, practising in Chelmsford as a consulting surgeon, under a Scotch diploma, brought an action in the county court, for 25*l.* 4s. for medical assistance, against Maria Warmington, Mr. Atwood's housekeeper at Hylands. Dr. Pritchard's charge was 1*l.* 1s. a visit, which his counsel considered to be reasonable, and further, the plaintiff asserted that the defendant had previously admitted it to be so, by paying 5*l.* 5s. for about the same number of visits. The defendant, on the other hand, deposed that the 5*l.* 5s. were paid for ten visits, and consequently that 10s. 6d. was the admitted charge per visit. Several medical men were called on her behalf, who differed as to the proper fee; one said 7s., another 10s., and the last, Dr. Bird, thought that 21s. was not unreasonable. The Judge summed up, and directed the jury to give a verdict for the full amount, if they thought 21s. had been paid previously for each visit, or for 16*l.* only, if they were of opinion that 10s. was the amount of the fee paid. After a quarter of an hour's consultation, they returned a verdict for the plaintiff for 22*l.* This decision makes a new era in the history of fees. Hitherto, we believe, except where a written contract existed, physicians could not recover their fees by an action at law. In this case, if there was a contract, it was implied only.

There have been several cases of cholera in the 46th regiment, now at Hull; two have terminated fatally.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, October 26.—Medical Society of London. *Subject:*—"Upon an Affection of the Nervous System simulating Chorea." By Mr. Pilcher. Eight o'Clock.

—— —— Guy's Hospital Physical Society. Eight o'Clock.

Friday, November 1.—Western Medical and Surgical Society. Eight o'Clock.

Saturday, November 2.—Guy's Hospital Physical Society. Eight o'Clock.

—— —— Medical Society of London. *Subject:*—Consideration of the Laws of the Society. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 26.

CLINICAL INSTRUCTION.

We have the gratification of announcing, that the columns of this journal will be shortly enriched by the publication of the course of Clinical Lectures delivered weekly throughout the year by the surgeons of St. Bartholomew's Hospital. The Profession at large will, we are assured, agree with us in thanking these gentlemen for promptly acceding to our request, that we should be permitted to lay before the public the results of an experience which has been acquired in one of the largest fields for professional observation. The hospital contains 580 beds; 400 are allotted to the surgical cases. In the year 1849, 77,710 patients were relieved, of whom 6146 were in-patients. And be it remembered that the in-patients are selected, not because they are recommended by a governor, whose subscription is necessary to the support of the institution; this hospital, in the possession of ample funds, is free of such restraint, and all those are received within its walls to whom sickness, suffering, or accident gives the title to admission.

We shall commence with the Lectures of Mr. Lawrence, the senior surgeon to the hospital; then will follow those of Mr. Stanley; and, thirdly, those of Mr. Lloyd.

There has long existed a growing opinion, that systematic courses of lectures are overdone; that there are too many of them; that they occupy too much time, and that the teacher fails in conveying to the mind of his class that sound practical information which can only be acquired by the bedside, the *post-mortem* house, or the dissecting rooms. The effort is now being made, at no inconsiderable increase of labour on the part of the teachers in the large London schools, to awaken and to direct in the student's mind the powers of observation, that he may learn the great secret of success with some of the most eminent who have ever existed among us, namely, to seize upon the prominent feature in the investigation of disease in a doubtful case; to assign to it its proper place, and, never allowing it to be thrown into the shade by accidental complications, to watch it to its gradual subsidence, or to endeavour to connect it with the morbid appearances witnessed after death.

Clinical instruction delivered by those who have been long entrusted with the care of the sick in a large hospital is not merely the property of students. The provincial surgeon still desires, though years may have rolled by, to hear what is going on in the scenes of his early studies, and the place where, perhaps, of all others, he has formed the greatest number of friendships. The surgeons of other hospitals wish to step beyond their own immediate circle, to compare results from many sources, and to analyse the theory of disease

and its treatment. Indeed, it would be a great boon to the medical world, were every hospital to publish, from an authentic source, an account of the cases which have been under treatment during the year. We do not mean such reports as occasionally come to light, in which a long list of cases being the sole object, the same patient counts as a fresh case if under treatment more than six weeks; but a true and faithful report of all the rarer and more interesting cases; followed by an accurate and full statistical synopsis of the whole. That such a time is beginning to dawn upon us we sincerely trust. Last year we commenced the system by publishing several of Mr. Quain's excellent lectures; and now we tender to the surgeons of St. Bartholomew's Hospital our best thanks for taking so prominent a lead in this highly important and popular movement, which removes a veil that once obscured from general view the light reflected from these institutions upon the nature of obscure disease, or upon that course of treatment most calculated to alleviate the sufferings of the patient.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Council of the Royal Medical and Chirurgical Society has it in its power to consolidate the interests of the Profession, and promote that cordiality of feeling and good fellowship which constitute the elements of our social strength. We inquired very recently what additional accommodation the Fellows might expect from being now the collective tenants in sole possession of the house in Berners-street; and we have since then gone over the premises. The house is throughout in excellent repair and unexceptionable order. The rooms on the first floor are spacious and lofty; and, from the appearance of the front drawing-room, we infer that the Council intend to make this their board-room. Here, at all events, we found a large table and a regiment of empty chairs ranged in due order for official business; and, without indulging in a querulous spirit, we asked ourselves why the Council should vacate their old quarters to monopolise the principal apartment in the house? Surely the room on the ground-floor afforded them "ample space and verge enough" for their deliberations; at any rate, the business of Europe is transacted in cabinets of much smaller dimensions, and we venture, therefore, to hint that the one-and-twenty councillors of the Royal Medical and Chirurgical Society, who meet only occasionally, might remain contented in their former apartment, and consign the best and largest room in the house to the use of the Fellows. This, indeed, would be an excellent reading-room; and it might be furnished, and handsomely too, at a moderate expense, which the Society can well afford. We desire no Eastern luxury; but easy chairs and sofas of good English manufacture are not very costly articles of *vertu*, and may, without any difficulty, be obtained. Here the Fellows of the Society might, after the fatigues of the day, retire to read the journals and newspapers, or any books they may wish; for be it observed, we maintain that the Society and its library should, like the Royal Institution in Albemarle-street, be open all day, instead of being accessible only between one and five o'clock, when professional men who enjoy any practice at all must necessarily be busy. Here, also, the table might be furnished, not only with medical but with some of the higher class of literary periodicals, in which valuable articles, having a direct bearing on many of the most important branches of medical science, constantly appear. Here, too, we should be glad to find some of the principal morning and evening newspapers, which, in addition to the political topics of the day, contain matters of interest to every medical man. All this we conceive to be very reasonable; nay, we will go further, and, without rivaling White's or Brookes', or entering into any more complicated club arrangement, we would suggest that members who wish a cup of tea or coffee might be supplied with it upon payment of a trifle to defray the expense. We could expatiate at considerable length upon the expediency of these several suggestions being adopted; but the Council, we have reason to believe, will, in these matters—which are only of domestic interest—consult the wishes of the Fellows, in doing which they will undoubtedly be promoting the best interests of the Society.

SIR JAMES M'GRIGOR.

We cannot record the announcement of Sir James M'Grigor's retirement from the Army, without expressing our sorrow that the long and useful career of this able officer has at last drawn to a close. Sir James M'Grigor fulfilled a most arduous and responsible post with an ability and faithfulness that can never be surpassed. The Army Medical Department has, in point of fact, been made by him; and it is to him alone that the great efficiency of this branch of the service is attributable. We trust that some means will be set on foot, not only among the Army medical officers, but among the Profession generally, to testify to this eminent veteran that the Profession knows how to appreciate the wisdom, integrity, and kindness of heart which made Sir James M'Grigor not only a most useful public servant, but one of the best and most benevolent of men. Such men do honour to human nature, and, when we find them, it is but common justice to crown them with laurels.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

1. *On the Use and Abuse of Alcoholic Liquors, in Health and Disease.* Prize Essay. By William B. Carpenter, M.D., F.R.S., &c. 1850. Pp. 283.
2. *Temperance and Total Abstinence.* By Spencer Thomson, M.D., L.R.C.S.E., &c. 1850. Pp. 184.

We regret that the crowded state of our columns has hitherto prevented us from reviewing the two, by this time, well known treatises, whose titles are above given. We regret also that the space which in a weekly journal can be legitimately given to these works is by no means commensurate with the vast importance of the subject of which they treat nor with the ability with which it is treated. We had intended to have analysed at length, and to have collated with care throughout the whole argument of these two works; but the length of time which has elapsed since their publication has doubtless rendered both of them so familiar to our readers that such an extended analysis and comparison would be manifestly a work of supererogation. But, if we are unable to devote to these treatises as much space as we had desired, we can assure their authors that it is out of no want of appreciation of the value of their labours.

It is obvious to those who are acquainted with the present state of physiology and chemistry, that the determination of the exact beneficial employment of alcohol is not possible in any other way than by observation of the effects it produces in the healthy or in the diseased frame. It is not safe to advance as a postulate, that alcohol or analogous substances serves any special purpose, (such as that, for example, of being burned in the respiratory process,) and then to determine its exact use, by reasoning upon this presumed property. The particular function assigned, or any other like function, is not backed by sufficient evidence to warrant such a mode of investigation; and we are therefore compelled to examine the effects of alcohol, as we do those of any other article of diet or medicine. We have observed, with some little surprise, that the views of Liebig, which have always

appeared to us ingenious, and indeed probable, but which are nevertheless based on no demonstrated facts, but on mere presumption and analogical argument,—we have observed, we say, that these speculations, which recent investigations have so rudely shaken, have been advanced by many writers with as much confidence as if they had been admitted within the pale of demonstrated truths.

Both our authors appear to have felt that to venture on speculation in this subject would be dangerous; and, although each frequently alludes to the common physiological opinions of the day, the fundamental and essential portion of the argument is, in both treatises, based simply upon the recorded effects of alcohol. Our authors have not, for example, inquired whether alcohol was as so much fuel which was burnt off in the lungs, but, rather, whether animal heat was or was not actually increased or sustained by its imbibition. It has not been demanded by them, whether alcohol produced any alterations in the composition of nervous tissue, but whether, and in what cases, its use was followed by affections of the nervous system.

This common appeal to observation and experience has produced in both treatises a great similarity in the mode of stating the argument, and in the examples which have been brought forward to illustrate it. In both works, but more fully in Dr. Carpenter's, will be found numerous illustrative cases, and portions of evidence bearing upon the effects of alcohol in healthy individuals. It is astonishing how much matter is brought together in the two treatises to upset the old-established and prevalent notions about the power of alcoholic liquids to give strength to the muscular system, to enable (from some inherent property) the body to withstand the influences of morbid poisons, to sustain the animal heat, to increase the mental powers, &c.

In this part of the argument, there is a singular and satisfactory accordance. Dr. Carpenter's conclusion is, that "the capacity of the *healthy* human system to sustain as much bodily or mental labour as it can be legitimately called upon to perform, and its power of resisting the extremes of heat and cold, as well as other depressing agencies, are not augmented by the use of alcoholic liquors; but that, on the other hand, their use under such circumstances tends positively to the impairment of that capacity."—(Preface, p. ix.) Dr. Thomson writes, that "alcoholic liquors are neither requisite nor desirable as articles of regular use by *healthy* men, under ordinary circumstances."—(P. 172.)

Both writers may then be said to be strong partizans of *habitual* abstinence in healthy individuals; but with both the question of *complete* abstinence from even the occasional moderate use of alcoholic liquors, such as is commonly considered to promote social enjoyment, is left as one for the moralist rather than for the physician.

In considering the effects of alcohol in diseased conditions, there is a greater divergence between the two writers. Dr. Thomson's work is particularly full and valuable on this point. He selects for consideration the most practical point of view from which alcohol can be considered, viz., in its character of a stimulant; and treats with great method and skill the medicinal and dietetic uses of alcoholic liquors considered as stimuli. He arrives finally at the conclusion, that, although not desirable as regular articles of diet for healthy persons, yet alcoholic liquors may, "in wholesome forms, and under proper control, be used occasionally with benefit; and further, that in some peculiar states of constitution, in some peculiar conditions of external relations, and in some modifications of diseased actions, they are eminently serviceable."

In this opinion we presume most of our brethren will agree. As far as we can see, it appears dictated by sound medical observation and good practical sense. Dr. Carpenter also discusses these points with his accustomed clearness and ability, but certainly is disposed to rank what we may term the remedial effects of alcohol lower than Dr. Thomson. He does not, however, pass them over, as has been stated by some of his critics, but, to a certain extent, expressly allows them.

The most important point of difference, however, between the two works, we take to consist in the extremely defined view which Dr. Carpenter entertains of the ultimate action of alcohol. Alcohol, no matter in what combination, or in what proportion, is, for him, always a *poison*,—that is, an agent which produces a disturbance in the normal actions of the animal economy; and its remedial uses he would place on the same footing as those of other poisons, such as mercury or antimony, opium or prussic acid, whose disturbing agency may be usefully employed to antagonize *other* disordered actions in the system. In this we conceive that he is perfectly right, and that, although the comparative weakness of its poisonous properties, when it is given in small doses and in particular combinations, may cause a superficial observer to doubt the accuracy of this method of speaking, yet any one who will think carefully on the point, will see that it is the true way of expressing the real action of this substance. Dr. Carpenter regards alcohol, therefore, as a powerful medicine, which is applicable to many diseased conditions, but which, from the very nature of its mode of action, ought to be excluded from ordinary use. If this view be admitted at all, it is quite obvious, that any liquid containing alcohol, and deriving from this ingredient sensible properties, is properly regarded as an alcoholic liquor, although the proportion of the spirit may not be more than two or three per cent. There has been much absurd criticism thrown away on this point, but criticism dictated evidently rather by a captious desire to find fault, than from real persuasion, on the part of the critic, that the appellation was an erroneous one; since in every treatise on Dietetics into which we have looked, we find beer and porter included with spirits and wine under the head of "Alcoholic Liquors," and their effects discussed accordingly. The simple fact, that all such beverages, taken in sufficient quantity, produce the phenomena of "alcoholic intoxication," is a sufficient reply to all such comments.

Dr. Thomson is certainly not disposed to regard alcohol as a poison, but rather to rank it with, or we should perhaps say to append it to, what he terms "ordinary stimuli," such as heat, light, air, aliment, &c. Under the head of "extraordinary stimuli," he includes alcohol, with other "stimulant egesta, such as tea, coffee, spices, drugs."

This divergence of opinion necessarily entails a different view of treating the subject on the part of our two authors, and it would be necessary, for a complete examination of the question, that the degree of truth involved in the expressions that alcohol is a "poison," or is a "stimulus," (extraordinary as contradistinguished from the common ever-acting stimuli, but still no poison,) should be first determined. The question is a most interesting one, and perhaps not susceptible of absolute solution. We cannot enter into it at present, but we hope at some future time to return to it, for it contains the essence of the scientific question.

We cannot take leave of our authors without expressing to both of them our gratification at finding medical men coming forward and discussing in so able a manner these topics, which are so fraught with weal or woe to many millions of our fellow-creatures. In treating these and similar topics, our profession assumes its proper place, as the helper and succourer of men. Dr. Carpenter is already illustrious throughout the medical world for his eminent talents and his patient and unwearied industry. He may be assured, however, that great as his fame as a physiologist may be, he has never written anything so calculated to produce immense and immediate good as his excellent works on the effects of alcohol.(a) He will for these, he may be sure, find an exceeding great reward in the approval of all honest men, and of his own conscience, although certain critical wiseacres may make them a handle for envious abuse. And we congratulate Dr. Thomson, also, in having produced a work which will not only add to his reputation as a practical physician, but which will aid in the propagation of principles, the establishment of which is of the greatest importance to the human race.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S., Demonstrator of Anatomy at St. Bartholomew's Hospital. London: Samuel Highley, 32, Fleet-street. 1850.

We who can remember, in times gone by, how short and elementary were the works considered sufficient to guide the student of anatomy in the dissecting rooms, regard with no small interest the manuals of the present day, whose increasing size bears witness to the accuracy and extent of

(a) Not only have as many as 35,000 copies of his Article on "Temperance and Teetotalism," in Dr. Forbes's Review, been issued by the "Scottish Temperance League," but it has been reprinted in the United States by Dr. Warren, the distinguished surgeon of Boston (N. E.); and we have recently seen a Dutch translation of it, with no less a name than that of Professor Schroeder Van der Kolk as its editor.

information now required by the teachers, and to the zeal and perseverance exhibited by their pupils. The union of bones one with another, the attachment of muscles, the sources of their supply both of blood and of nervous power, the structure of secreting glands, and the course of the fibres composing the brain are investigated in the schools to an extent that would surprise those who had allowed twenty or thirty years to pass without noticing the progressive change. It requires, therefore, a man of no ordinary capacity to write a good manual of anatomy for one of the largest, if not absolutely the largest, schools of medicine in this country. The work, not yet quite completed, has appeared in parts. Three are already published; the fourth, containing the dissection of the brain, spinal chord, eye, mammary gland, and testicle, is in the press, and announced to be on the point of immediate publication. We recommend Mr. Holden to let no time elapse before his work is presented to the public in its complete form.

Although there is no claim for novelty on the part of the author, we think we can detect a latent wish, here and there half expressed, to curtail and to simplify the superfluous nomenclature, which is a perfect stumbling block to all beginners. The more this is carried out the better, both in this country and in Germany. Why should we speak of Zinn's zone, Winslow's foramen, Hey's, Burns', Gimbernat's, Poupart's, or Winslow's ligament? What guide to the situation or connexions of a part, is the proper name of some defunct anatomist?

The descriptions throughout the work are clear and concise; and there is none of that ambiguity of language, which is an almost fatal error in such publications. The work has been evidently written from personal dissections; there is a freshness in the style which no mere copyist ever succeeded in attaining. The directions to the student, as to the course which he should follow in exposing the different parts, seem to us admirable: they insure him a good survey of the entire body. The introduction here and there of some sound practical remarks, or of some interesting surgical fact, tends to break in upon the monotony of mere descriptive anatomy, and to awaken the attention of the dissector to the importance of the parts which he is examining. We strongly recommend the work to the students of all schools; others of mature age may refer to it, and study it with advantage.

The Anatomical Remembrancer; containing a Concise Description of the Bones, Ligaments, Muscles, and Viscera. Fourth Edition. London: S. Highley, 32, Fleet-street.

This little work, having passed through three large editions, has undergone a thorough revision, and re-appeared in new type. It is, as it professes to be, an anatomical *vade mecum;* but, in 249 small pages, there is compressed an amount of accurate information, which those who have never seen "Elements of Anatomy," save in two or three thick octavo volumes, would scarcely believe possible. Some important additions have been made, to bring the work up to the present day. No book could be better fitted as a pocket companion for those who, on the eve of an ordeal in Lincoln's-inn-fields, wish from time to time to recal facts, which defective memory or anxiety of mind may render obscure or doubtful. He who knows well all that this little work contains, may undergo a very creditable examination in anatomy.

GENERAL CORRESPONDENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Letter II.

"Nihil est aliud magnum quam multa minuta."

[To the Editor of the Medical Times.]

Sir,—In illustrating the working of "the system," it will be necessary to cite one or two more examples, to show that it is by no means restricted to the selection of presidents. I need scarcely observe, that the secretary is an important officer, and he has a great deal to do. It is true that various causes, which we may hereafter consider, have reduced the intellectual requisitions for that office as nearly to a sort of zero as can reasonably be expected in a functionary of this character; for, with the exception of furnishing a brief abstract of the papers, and the editing of a volume, —with the comfortable reservation that neither he nor the Council are responsible for either the "statements, the reasonings, or the opinions" therein contained,—he has nothing to do but that which an ordinary clerk could perform just as well. Experience has shown, too, that, with a considerate regard for the imperfections of our nature, good reading has not been always regarded as an indispensable qualification. As truth, Sir, is only injured by special pleading, I shall select, for an illustration of the system, the case of a gentleman who, as regards the execution of the comparatively humble duties with which he was thus officially charged, was accounted to have discharged them very creditably,—I mean Mr. Perry; moreover, when this gentleman resigned his office, Mr. Lawrence, a surgeon to the hospital to which Mr. Perry was an apprentice, so warmly eulogised him as to become almost pathetic in depicting the loss which the society was about to sustain; and it is hard to say to how unfathomable a depression he might not have lowered our spirits, if he had not, in furnishing us with a more intelligible measure of his own regret, brought us again into soundings, by the cheering assurance that in Mr. Shaw we should fortunately secure those very excellencies the loss of which we should have had to deplore in the departure of Mr. Perry. In a future letter, we may see cause for taking a somewhat more measured view of the matter; but, for the present, to our facts. Mr. Perry became a member of the society in 1828, but remained only a year or two, resigning in 1832-33, and his name does not appear again on the list of members for several years—that is, not until 1836. Now here it should be observed, that Mr. Perry was an apprentice of Mr. Earle's, of St. Bartholomew's, who about this time (1835) became president of the Medico-Chirurgical Society; and it is usual for the officers to continue the second year, which would, of course, carry on the president and secretary of 1835 to the end of 1836, the period for nominating the officers of 1837 inclusive. We, accordingly, not only find Mr. Perry's name on the list of members of 1836, but his name on the balloting-lists in no less prominent a position than that of surgical secretary. He was, of course, elected, and held the appointment for six successive years, the *medical* secretaries having been changed four times in the persons of Drs. Glendenning, H. Lee, Mayo, and Cursham. Mr. Perry now resigned the secretaryship, having obtained an appointment as Inspector of Prisons, a piece of patronage, it is said, intrusted by Sir James Graham to Sir Benjamin Brodie. Moreover, Mr. Perry was then elected a vice-president, and thus continued two more years a member of that body; that is, during eight years consecutively, (which, with two years in 1831-2, makes ten,) and during four presidencies, one of which, we would observe, was that of Sir Benjamin Brodie. To be sure, Mr. Perry was elected a vice-president over the heads of his seniors in the Society,—over men who had never left it, his seniors in the profession, and who had not been all undistinguished by their labours in science; but when a man is in for a good thing, there is nothing like the "*nihil reputans actum siquid superesset agendum*," and we have already seen, that the Council had not been always very scrupulous in regard to the claims, and still less the feelings, of Fellows. Then, Sir, the next thing which happened appears to have been unexpected, viz., Mr. Perry's retirement from the society; but on many accounts there seems little ground for surprise. An inspectorship of prisons is a shelving appointment, and, as it is said to be worth 800*l.* or 1000*l.* a year, not a bad shelf either. Besides, in withdrawing Mr. Perry from the practice, it might not unreasonably be supposed to have diminished his interest in the science of his profession, in regard to which he had not perhaps lived long enough to have become much distinguished. If, however, Mr. Perry's admiration of the advantages of science had slumbered awhile, we find it vividly awakened on his becoming eligible to fill a vacancy in the Council of the College of Surgeons. But, notwithstanding that his long tenure of place in the Council of the Royal Medical and Chirurgical Society might not unfairly have been regarded as no inauspicious introduction to the kindred proceedings of that of the college, the Fellows of that learned corporation either thought this "too bad," or, for some other reason, did not favour Mr. Perry with their support, as, on the ballot, he was not elected. A great deal has been said on the foregoing facts, and much that was not complimentary to Mr. Perry; but, after all, it is the system that is in fault. Mr. Perry seems early to have perceived the tone in which the society was conducted, and to have taken a tolerably correct view of the measure and description of its usefulness. He rejoined it when it seemed likely that the Association might be useful to him, and again resigned when it suited his convenience. Mr. Earle gave him that support which it is the rule of the "hospital system" to give to hospital apprentices, and in cases far less excusable. Now, the relations of the facts which I have stated, and those of the hospital

system thereto, will be more plainly shown, when we have collected some additional facts. At present I abstain from further comment, and am, Sir, &c., SPECTATOR.

ILLEGAL PRACTITIONERS.

[To the Editor of the Medical Times.]

SIR,—You have taken the liberty to call me an illegal practitioner. I am a graduate of Cambridge, have the diploma of medicine from Edinburgh, and am a member of the Royal College of Surgeons.

Till very recently I practised in Liverpool: you will not doubt that my medical qualifications entitled me to practise there. Have I become *illegal* because I now live in London, instead of Liverpool?

Am I illegal simply because I have changed my residence?

These questions must suggest the unfitness of test that rests on the licence of the College of Physicians.

It would be worthy of you to advocate the removal of an outworn and factitious distinction, and not to insist on it, for the sake of party.

The ground of difference between me and the party you espouse is one of therapeutics: it does not at all touch the question of medical science and of medical education.

I should have expected from you, judging of you from your antecedents, fair play.

Those who have adopted the principles of Hahnemann, if educated, are entitled to respect for their independence of character, not to obloquy and abuse.

Call us heretics, if you please; but do not indulge in the very easy but very undignified expedient of calling us quacks and impostors.

Come to the Hahnemann Hospital, and convince yourself that we can and do cure disease. If we fail, expose our failures; if we succeed, acknowledge our success. Till then, suspend your opinion.

I am, Sir, &c., J. CHAPMAN.

Grosvenor-street, Oct. 16, 1850.

[If Dr. Chapman would insert his name and qualifications in the "Directory," all men would see them. But we perceive he has so homœopathic a share of vanity and love of notoriety, that he hesitated to adopt this simple course. Dr. Chapman is not satisfied with the position we gave him in the ranks of the Hahnemannians. Are there, then, schisms in that camp already, and is the Hahnemann Hospital to share the proverbial fate of a house divided against itself? We shall see.

Certes, it is the first time we have been told that therapeutics form no part of medical science.

On the subject of homœopathy we shall have a few words to say next week.—ED. *Med. Times.*]

[To the Editor of the Medical Times.]

SIR,—In your last number, Dr. Jones, of Washington seems to think, that the qualification of M.D., Edinburgh, gives him a legal right to practise in England as a general practitioner. I would beg to direct your attention to a case that occurred in 1833, and I presume that the law has not been altered since then.

The case to which I allude is to be found in Vol. IV. of Barnewall and Adolphus's Reports, page 604, and was an action brought by the Apothecaries' Company against a Mr. Collins, *who held a physician's diploma from a Scotch university*, for practising as an apothecary in England. The Company recovered in the action, and the opinion of the Court of King's Bench was afterwards taken. The counsel for Mr. Collins contended, that as the privileges of the *English* universities, and of the College of Physicians, were saved by the 29th section of the Act; it extended, by *implication*, to a physician having a diploma from a university in *Scotland;* but Lord Denman interrupted the counsel with this inquiry, "How can you get over the express words of the statute?" The reply was, "It is certainly difficult." Judge Littledale said, "That the act, by expressly exempting the two *English* universities, did *not* exempt those of Scotland; also, Scotland was not in contemplation." Judge Parke observed, that "the words of the act were too plain to be got over." Here, then, was the identical question settled, and the penalty against Mr. Collins recovered.—I am, Sir, &c.,

WILLIAM FOSS.

Stockton-upon-Tees, October 15, 1850.

MR. THURSFIELD'S LETTER.

[To the Editor of the Medical Times.]

SIR,—A word of comment, and I have done troubling you. "He swore the lad had two testicles." Quite correct, Mr. Thursfield. I repeat the passage. "The testicles," (plural number,) "are perfect, but small." "He must have been aware I could not have minutely described parts which I had never seen." Wrong conclusions, Mr. Thursfield, as I could have given such description myself, if told it by another. "Freely admits a large No. 3 silver sound." Can this be a misprint? I think not, Mr. Editor, from your general correctness; but if not, alas! poor wretch. Well might he have exclaimed, "oh! how you do *bore* me;" but, lest I bore you with too long a letter, I am, Sir, &c.,

Kidderminster, Oct. 19, 1850. T. WALDRON BRADLEY.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

Saturday, October 19, 1850.

Dr. J. R. BENNETT, President, in the Chair.

Dr. R. H. Semple read a paper on

VALVULAR DISEASE OF THE HEART.

The author commenced by observing, that the diagnosis and pathology of diseases of the heart, although formerly wrapped in great obscurity, were now rendered remarkably exact and definite by the labours and researches of modern investigators. The healthy sounds were now referred to their true causes, and the morbid ones were accurately connected with their true pathological phenomena. But he considered that it might be a question whether too much stress was not laid at present upon the stethoscopic indications in forming a prognosis, and whether or not too little regard was paid to the attendant circumstances and general health of the patient. He by no means denied the importance of cardiac diseases, especially of the diseases of the valves; but it was a very curious circumstance that, notwithstanding both theory and experience taught us the extreme danger of such diseases, yet that clinical investigation showed that very extensive disease of the cardiac valves *might* exist without seriously impairing the health or greatly abridging the usual term of human existence. The author then read the history of three cases which had occurred in his own practice. The first was that of a man who died at the age of seventy, without manifesting any of the usual severe symptoms of cardiac disease, although the stethoscopic indications showed very clearly extensive disease of the mitral and aortic valves; the second case was that of a lady, with whom the author was acquainted for more than ten years before her death, and who enjoyed, during that time, almost uninterrupted good health, and was actively and daily engaged in the superintendence of a large family; she died suddenly, at the age of seventy. In the third case, which was that of an infirmary patient, the author was acquainted with the existence of serious valvular disease for ten years before her death; yet she suffered very few of the rational symptoms of cardiac disease, and died of pleuro-pneumonia, at the age of eighty-three. In all these cases, *post-mortem* examinations were made, and most extensive and serious cardiac lesions were discovered, consisting of an ossified condition of the aortic valves, rigidity of the mitral valves, and a dilated, ossified, and rigid condition of the great arteries. The author considered, that whatever explanations might be offered to account for the comparative immunity of these patients from severe symptoms during life, yet the facts themselves were curious and instructive; and he thought he might appeal to practical observation to prove, that however important might be the diseases of the valves, and however valuable might be the information derived from the stethoscope, yet that these diseases were not so rapidly and invariably fatal as they were generally supposed to be; and that, in forming our prognosis, however cautious and guarded we might and ought to be, yet that facts such as he had brought before the notice of the society should be held in view in forming our opinion.

Mr. Richardson alluded to the fact, that persons suffering from valvular disease of the heart, generally died after taking food, by which the circulation was excited, the action of the heart became laboured, and death ensued. He considered this to be a point of some importance. In illustration of the value of digitalis under such circumstances, he mentioned

the case of a gentleman under his care, who had valvular disease, and who often felt as if he were dying, after taking food. Ten drops of the tincture of digitalis always afforded him relief.

Mr. Nunn drew a distinction in cases of valvular disease, based on the seat of the deposit; when lymph was thrown out it was deposited on the serous membrane, while ossific matter was found between the layers. In the one instance, the adventitious matter was, as it were, entangled in the membrane of the valves; in the other, it was the result of a peculiar morbid action.

Dr. Crisp thought that, so far from the normal and abnormal sounds of the heart being well known, there was considerable difference of opinion on the subject among cardiac pathologists. Hope and Williams did not hold the same opinion on these points. The relative danger of valvular disease depended in some degree on the age of the patient. If he were young, he would hesitate in recommending the life for assurance; but if he were above sixty years of age, he thought the diseased state of the valves had a compensating salutary influence, by impeding the force of the heart's action, so as to adapt it to the changes that had taken place elsewhere in the system. This was the case with old Parr, whose arteries were mere cylinders of bone. He agreed with Dr. Semple as to the injurious action of digitalis; the impediment to the circulation was mechanical, and could not be removed by that drug.

Dr. Golding Bird could not agree with all Dr. Semple's views. For instance, he set out with the opinion that a patient might have extensive valvular disease, and not be aware of it, from the absence of rational signs. Such cases he (Dr. Bird) regarded as only the exception to the general rule. There is a great tendency in old age for the human frame to become petrified; the cartilages are converted into bone, and the valves of the heart and the arteries become ossified. In the cases before the society there were reasons why the patients suffered so little, even independent of old age. We are too much accustomed to speak of valvular disease *en masse;* the particular valves affected should be specified. In two of the cases of diseased aortic valves there was regurgitation through the mitral. This, he thought, acted as a sort of safety valve for the aortic valvular disease. If the mitral valve had been healthy, the patient would have suffered greatly, as the blood would have been prevented returning to the left ventricle by regurgitation. He did not wish to underrate the importance of mitral valve disease, but he must regard it as salutary under the circumstances. Dr. Semple's patients were advanced in age, and of quiet dispositions. This tended greatly to lessen their sufferings; for an irritable, angry temper, and the excitement of passion, would accelerate the circulation, and cause great difficulty and laboured action of the heart, the blood being impeded in its hurried passage through the contracted orifice. He (Dr. Golding Bird) had attended a prize-fighter with valvular disease, whose case illustrated this point. He was a man of quiet disposition, and did not present any indications of suffering, as long as he was not excited. He had latterly been much occupied and excited in arranging for a prize-fight, and consequently absolute symptoms of cardiac disease set in. Patients of a quiet, non-irritable disposition, with valvular disease, may go on well for a time; but, if disturbed by excitement or a fit of passion, their lives may be said to hang on a thread.

Dr. Sibson thought that, in valvular heart disease, there was not generally much suffering, until other organs were involved: obstruction in other organs was more likely to lead to a fatal result. He mentioned several cases, to show that a diseased heart might go on well, unless the capillaries were obstructed. Under the action of digitalis and prussic acid the heart's action is arrested, because the blood cannot flow through the pulmonary capillaries. This affects the right cavities: in fatal syncope the left cavities are obstructed. The condition of the capillaries is the great key, and the key of the treatment also, which must be directed to their relief.

Mr. Dendy agreed with Dr. Semple, that cases of valvular cardiac disease may continue for some time, if the patient be kept quiet; but mental disturbance or excitement may at any time induce suddenly a fatal termination. Quietude and temperance in valvular disease will tend to prolong life.

Mr. Canton objected to the description generally given of valvular disease, the seat of the deposit not being stated, as to whether it occupied the upper third or lower two-thirds of the valves. There would be a great difference in the circulation as to whether the upper or lower part was the seat of disease. In old persons, ossific deposits are generally found in the lower two-thirds. In Dr. Semple's cases, it is stated, that on looking at the valves from above, only a slight crack could be perceived, while from below a large, bony deposit was detected. In young people, the disease being caused by rheumatism, the lower two thirds are either unaffected, or else but slightly thickened, while the upper third is much diseased, with everted edges, so as not to close the orifice, leaving a large aperture, through which regurgitation takes place. He agreed with Dr. Golding Bird as to the safety valve action of the regurgitation through the mitral valve, under such circumstances, and believed that it was aided by an enlargement of the sinuses of Valsalva, which are capable of receiving more blood than when the valves are healthy. This enlargement he had often met with in the examination of the bodies of old persons.

Mr. Barlow remarked, that they all seemed disposed to reject Dr. Semple's conclusion, that valvular disease was less dangerous than hitherto supposed. He thought Dr. Bird's view of regurgitation through the mitral valve acting as a safety valve to the heart was quite conclusive, although it had hitherto been believed that the extent of disease marked the extent of the danger. He (Mr. Barlow) thought that Dr. Semple's patients had probably had more hair-breadth escapes than the Doctor knew of. The condition of the muscular fibre in these cases had something to do with the danger. If it were healthy, life would be more likely to be prolonged, than if it were degenerated and become fatty.

Mr. Streeter observed, that the degree of danger in valvular disease very much depended on the age of the patient and the cause of the organic disease; whether it were induced by inflammatory deposition, or accelerated degeneration of structure. It was necessary, also, to discover how far the adventitious matter interfered with the heart's functions; for, if it occurred slowly, there would be time enough for the heart to adapt itself to the change, as occurred in other parts of the circulation. He thought it a very serious thing to destroy hope altogether, for there were many cases where very serious disease existed, in which, with care, quietude, &c., life may be prolonged. When other viscera are involved, the progress of the disease of the heart is greatly accelerated.

Dr. Semple thought that some of the remarks that had been made were founded on a wrong estimate of his views. He did not mean to consider valvular disease unimportant; he could have brought forward many cases where there was much suffering and the usual result; but he purposely selected cases which were not generally met with, and which, consequently, were of greater interest. This was shown by the valuable discussion that had followed the reading of his paper.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 18th inst.:—

Brettingham, Charles, Finchley-road, St. John's Wood.
Booth, Charles, Stoney Middleton, Derby.
Flewitt, Motteram William, Birmingham.
Gordon, Charles, Macceo, Brazils.
Haigh, Thomas Allen, Houley, Huddersfield, Yorkshire.
Horton, Richard George, Leeds.
Lowe, Thomas, Edgbaston, Warwickshire.
Washbourn, Thomas Buchanan, Gloucester.

University of St. Andrews.—List of gentlemen who had the degree of doctor of medicine conferred upon them, October 18, 1850:—

James Ainsworth,	M.R.C.S.I.,	Co. Antrim, Irel.
Alfred Thomas Brett,	M.R.C.S.E., L.A.C.,	Surrey.
Edward Bishop Dormann,	M.R.C.S.E., L.A.C.,	Kinsale, Ireland.
Augustus Eves,	F.R.C.S.E., L.A.C.,	Cheltenham.
John Furse,	M.R.C.S.E., L.A.C.,	Devonshire.
Henry Crowhurst Roods,	M.R.C.S.E.,	London.
William Henry Woods,	A.B. Trin. Coll. Dub.,	Dublin.

Military Appointments.—71st Foot: Staff Assistant-Surgeon Wm. Simpson, M.B., to be assistant-surgeon, vice Jane, who

exchanges. Hospital Staff: Assistant-Surgeon Michael Allen Jane, from the 71st Foot, to be staff assistant-surgeon, vice Simpson, who exchanges.

NAVAL APPOINTMENTS. — Assistant-Surgeon Wm. M. K. Saunders (1841), from the Victory flag-ship at Portsmouth, to the Birkenhead steam-frigate at Portsmouth.

OBITUARY.—On the 11th inst., Dr. Edward Wm. Burton, staff surgeon, Senior Resident Medical Officer, General Military Hospital, Dublin. On the 14th inst., aged 58, Mr. Wm. Bates, surgeon, of George-street, Blackfriars-road. In Monterey, California, August 14th, Dr. Wm. L. Booth, Assistant-Surgeon, United States Army. On the 4th inst., Dr. Maginnis, of Savannah, drowned at sea, with his wife and family, when the Isaac Mead was run down by the Southerner steamer, on which occasion twenty-four lives were lost. On the 1st of August, at Malta, Dr. Thomas Elliotson, of debility.

BRITISH MEDICAL FUND.—A meeting of the profession took place at Brighton, on the 21st inst., when, among other resolutions passed, it was resolved,—"That this meeting approves of the principles of the British Medical Fund Society, and recommend it to the attention of the medical profession in Brighton." Thus it would appear, that this valuable institution is meeting with that support and encouragement it so much deserves, and which we trust it will receive from every member of the profession.

AT a meeting of the Leeds members of the Medical Protection Office, London, held on the 21st October, 1850, George Wilson, Esq., in the chair, it was moved and seconded, and unanimously resolved, that Mr. F. W. Brearey be requested by the agent to furnish the Leeds members with a full statement of the affairs of the Medical Protection Office to the close of his management; and that, in the meantime, no further accounts be supplied by the agent here, and that all moneys collected by him since the 14th September, on account of the Leeds members, be retained in his hands; and that this resolution be inserted in the *Medical Gazette*, the *Lancet*, and the *Medical Times*. The meeting was then adjourned until the accounts required be furnished.

At a public meeting held at Oxford lately, it was resolved, that the introduction of the Public Health Act was quite unnecessary, and should be strenuously opposed, as it would increase the burden of local taxation. Oxford is perhaps one of the worst drained cities in the kingdom.

THE CHEMISTS' ASSOCIATION OF LIVERPOOL. — We learn from a correspondent, that Professor Muspratt's College of Chemistry is eminently successful; the most flattering testimonial it can receive is, that it is full of students.

THE Board of Health at Darlington has been instituted, but its proceedings are kept secret, all reporters being excluded. It consists of eighteen members.

DR. LEES' READER IN ANATOMY, Dr. Acland, commences his lectures on animal physiology, at Christ Church, Oxford, on the 31st inst.

SMALL-POX is very prevalent among the Sioux Indians, and has proved very fatal. Many years ago the Mandan tribe was entirely destroyed by this plague. The Indians have the most intense dread of small-pox, and abandon even their dearest friends when attacked. The Sioux Indians have but recently been freed from the cholera.

Mr. FRODSHAM, the chronometer-maker, has left 200*l.* to the Fever Hospital, and the same amount to King's College Hospital.

CYSTICERCUS OCULI.—The newspapers state that Dr. Mackenzie has lately removed a cysticercus from the left eye of a man, who went to Glasgow purposely from England to undergo the operation, which was perfectly successful. This is the second case of the kind that has been operated on by Dr. Mackenzie within the last two years. The patient, in the first case, was a female. It would be more in accordance with etiquette, if the profession were made acquainted with these facts through the medium of the medical journals; the newspapers are not the proper vehicle for the transmission of medical phenomena.

THE obituary of a Birmingham paper records the decease, on the 11th inst., at Weeford Cottage, near Lichfield, at an advanced age, of Mr. Proctor, one of the oldest surviving relatives of the *late* Thomas Guy, Esq., founder of Guy's Hospital. The writer of the paragraph must have a strange idea of the meaning of word "late," as applicable to the dead. Guy died on the 27th Dec., 1724; the hospital which he founded not being opened for patients till near the end of January in the next year, when 60 patients were admitted.

ABOUT 60*l.* have recently been collected from charity sermons on behalf of the Lancaster Dispensary.

HEALTH OF LONDON DURING THE WEEK.

THE return for the week ending last Saturday shows that the deaths registered in the metropolitan districts amounted to 860, a number which, though it indicates a slight increase of mortality on the previous week, when it was 839, is still less than the weekly average to the extent of 125 deaths; the average being derived from the deaths of ten corresponding weeks in 1840-9, and raised in the ratio of increased population. By means of a comparative statement of the 860 deaths, according to the different ages at which they occurred, it may again be shown, as in the preceding week, that an improved state of health exists among the young, but that the middle-aged part of the population begin to suffer more, while the aged die exactly at the average rate of mortality. The aggregate result of zymotic or epidemic diseases is still favourable, as compared with that of previous years, the deaths in this class having been 198 last week, while the corrected average is 256. The decrease is observed principally in small-pox and measles, 5 children having died from the former and 16 from the latter; 38 died of scarlatina, the average of which amounts to 57, but is swelled chiefly by the unusual mortality of the same week in 1848, when the deaths from scarlatina were 147. Diarrhœa continues to decline, though the fatal cases are still rather more numerous than usual at this period of the year. Typhus maintains the increased mortality which was observed in the last return; the victims of fever number 54. Last week four deaths were recorded from cholera.

MORTALITY TABLE.

Deaths in the week ending Saturday, Oct. 19, 1850.

(Metropolis.)

CAUSES OF DEATH.	Oct. 19.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	347	333	168	860	9033
SPECIFIED CAUSES	345	333	168	846	8975
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	145	40	13	198	2347
SPORADIC DISEASES:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	2	34	15	51	526
Tubercular Diseases	45	108	4	157	1682
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	33	34	32	99	992
Diseases of the Heart and Blood-vessels	3	22	9	34	256
Diseases of the Lungs, and of the other Organs of Respiration	58	31	30	119	1147
Diseases of the Stomach, Liver, and other Organs of Digestion	15	30	8	53	618
Diseases of the Kidneys, &c.	...	...	3	3	79
Childbirth, Diseases of the Uterus, &c.	...	6	1	7	111
Rheumatism, Diseases of the Bones, Joints, &c.	3	4	2	9	57
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	12
Malformations	1	...	...	1	24
Premature Birth and Debility	14	2	...	16	188
Atrophy	14	2	4	20	184
Age	...	...	37	37	481
Sudden	1	3	3	7	90
Violence, Privation, Cold, and Intemperance	11	17	7	35	210
Causes not Specified	2	...	...	14	58

The Deaths in the several Districts are as follow :—

DISTRICTS.	Population in 1841.	Oct. 19, 1850.	Sum of Ten Weeks.
London	1948369	860	9033
West	301189	123	1325
North	376568	148	1539
Central	374199	147	1731
East	393067	232	2065
South	503346	210	2373

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	31	Heart	31	Phthisis	120
Bronchitis	37	Hooping-cough	23	Pneumonia	53
Cholera	4	Hydrocephalus	13	Scarlatina	38
Childbirth	4	Influenza	0	Small-pox	5
Convulsions	28	Liver	11	Stomach	3
Diarrhœa	35	Lungs	1	Teething	5
Dropsy	19	Measles	16	Typhus	54
Erysipelas	7	Paralysis	15	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	748	439	309
Females	754	421	333
Total.....	1502	860	642

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					A.M.	P.M.	Miles.		
Sunday	30·085	43·8	37·8	— 7·2	W.S.W.	S.W.	100	0·00	The sky was overcast throughout the day; cirrostratus. Fog prevailed during the morning.
Monday	29·883	46·4	39·7	— 4·3	S.W.	S.W.	140	0·00	The sky was overcast throughout the day; cirrostratus.
Tuesday.....	29·950	44·7	35·5	— 5·6	W. & N.W.	N.W. & S.W.	105	0·00	The sky was overcast till near noon; three-fourths were covered till 4h. p.m.; the amount of cloud was variable afterwards; cirrocumuli, cirri, and haze.
Wednesday.	29·956	49·2	40·6	— 0·3	S.W.	S.W.	80	0·00	The sky cloudless throughout the day.
Thursday ...	29·943	51·5	43·7	+ 2·7	S.W.	S.W.	135	0·00	The sky, with slight exceptions, was covered with clouds until 6h. p.m.; generally clear after
Friday	29 983	54·2	49·4	+ 6·0	S.W.	S.W.	120	0·00	Sky obscured by thick fog till 11h. a.m.; from this time till 2h. p.m., it was generally clear; during the remainder of the day clouds prevailed, but variable in amount; cirrocumuli, cirri, and fleecy clouds.
Saturday ...	29·800	53·1	48·7	+ 5·5	S.W.	W.S.W.	100	0·00	The sky covered throughout the day; cirrostratus.
Means ...	29·943	49·0	42·2	— 0·5	S.W.		SUM 780	SUM 0·00	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications have been received from—

Dr. Hinds, M.D., of Birmingham, "On Poisoning by the Cyanide of Potassium."

Dr. Butler Lane, of Ewell, "On the Detection of Blood Stains."

Report of the Introductory Meeting of the King's College Medical Society, with Mr. H. Smith's address.

An Old Subscriber, Holyhead; Spectator, "On the Royal Medical and Chirurgical Society," No. III.; Secretary of the Pathological Society: Mr. W. Bradley, of Kidderminster; Mr. David Wilson, of Brook-street; Mr. George King, of Bath; Mr. Herleky, of Litcham, Norfolk; Mr. Jerrard, of Honiton.

The following Publications have been received—

Remarks on Insanity; its Nature and Treatment. By Henry Monro, M.B., Oxon, &c. &c. In Two Parts. Part I. Pp. 75. London: Churchill. 1850.

1. Observations on the Treatment of Phthisis Pulmonalis. Pp. 24. With Plates. 2. Lectures on Clinical Medicine. No. I. With Woodcuts. 3. Lectures on Clinical Medicine. No. II. With Woodcuts. Reprints from the "Monthly Journal of Medical Science." By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine and Clinical Medicine in the University of Edinburgh, &c. &c. Edinburgh: Sutherland and Knox. 1850.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S. Pp. 119. London: Churchill. 1850.

On the Identity or Non-Identity of Typhoid and Typhus Fevers. By Will. Jenner, M.D., Professor of Pathological Anatomy in University College. Pp. 102. London: Churchill. 1850.

Essex Herald of October 8.

Asiatic Cholera and its Treatment. By Henry Mudge, of Bodmin. Pamphlet. Pp. 12.

Practical Observations on the Diet of Infancy and Childhood. By T. H. Barker, M.D. Pp. 54. London: Simpkin, Marshall, and Co. 1850.

Address to a Medical Student. Second Edition. Pp. 167. Oxford: John Henry Parker. 1850.

Our Institution and its Studies; an Introductory Lecture delivered at the Bristol Institution, by John Addington Symonds, M.D. Pp. 42. London: Churchill; Bristol: Evans and Abbott. 1850.

Report of the Proceedings of the Pathological Society of London. Fourth Session, 1849-1850. London: Bentley.

General Pathology, as conducive to the Establishment of Rational Principles for the Diagnosis and Treatment of Disease. By John Simon, F.R.S., Officer of Health to the City of London. Pp. 288. London: Renshaw. 1850.

Die Seebäder zu Ostende. Von Dr. Verhaeghe. Pp. 128. Berlin. 1849.

Restauration Complète du Nez, d'après la Methode de M. Dieffenbach. Par le Dr. Verhaeghe. (*Reprint.*)

Recherches sur la Cause de la Phosphorescence de la Mer dans les Parages d'Ostende. Par le Dr. Verhaeghe. (*Reprint.*)

Hydrocephalus Reconsidered, and its Relations to Inflammation and Irritation of the Brain Defined. With Cases from Hospital and Private Practice in Exemplification of its Pathology, Prevention, and Successful Treatment. By Thomas Weeden Cooke, M.R.C.S., Eng., &c. Pp. 112. London. Highley. 1850.

Reports on the Origin and Progress of Pestilential Cholera in the West Yorkshire Lunatic Asylum during the Autumn of 1849, and on the Previous State of the Institution. Dy. Dr. T. G. Wright, Visiting Physician, &c., &c. Pp. 136. London: Longman. 1850.

Epidemics Examined and Explained; or, Living Germs Proved by Analogy to be a Source of Disease. By John Grove, M.R.C.S.L. Pp. 192. London: Ridgway.

The Journal of Psychological Medicine and Mental Pathology, for October. Edited by Dr. F. Winslow.

On Catalepsy or Trance. By Ebenezer Milner, M.D. Reprint from *Edinburgh Medical and Surgical Journal.* Pp. 20. Edinburgh: Inches.

Holden's Manual of Dissection. Part III. 1850. London: Highley.

Muller's Archiv. No. III. 1850. Berlin: Verlag, Von Keit, and Co.

Sixteenth and Seventeenth Annual Reports of the Carlow District Asylum for the Insane Poor. By Dr. M. E. White. 1849 and 1850. Carlow.

The Anatomical Remembrancer; containing a Concise Description of the Bones, Ligaments, Muscles, and Viscera. Fourth Edition. London Highley.

The unusual length of Mr. Ancell's Lecture has compelled us to omit much valuable matter. The letters of our Italian, French, and Scotch correspondents are in type, as are also those of Vigilantius, "Advice to Students;" Alfred Markwick, "On a New and Effectual Mode of Producing Diaphoresis;" Chemicus, "On Dr. Scoffern's Sugar Refining Process;" Mr. Henderson, "On the Preparation of Crania;" and Mr. Forsyth's communication "On Wounds of the Stomach."

We have particularly to request that all letters and communications intended for the Editorial Department of the "Medical Times" be addressed to the Office in Princes-street. If, after this and many other similar notices, gentlemen will persist in forwarding to any other place letters intended for the Editor of this journal, we shall be compelled to the determination to pass them by unnoticed. The practice is most inconvenient, and personally disagreeable.

Mr. Wilson's Letter on Homœopathy will be published next week.

Mr. Hardy is thanked.

Mr. Jerrard has been addressed privately.

We are most unwillingly obliged again to postpone Dr. Sheridan Muspratt's valuable paper, "On the Influence of Chemistry in the Animal, Vegetable, and Mineral Kingdom."

The Regulations of the Royal College of Surgeons of Edinburgh will be published next week.

J. S. M. should apply to Dr. Hodgkin, of Bedford-square.

I. P. C.—We should do an unkindly act to our correspondent were we to publish his note. He will, on consideration, thank us that we do not. His best course is to be silent.

ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, Esq.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XIV.

Ectropium continued.—Ectropium of the external portions of the lids.—Adhesion of the Lids to the Globe of the Eye.—Adhesion of the lids to each other.—Hypertrophy of the Skin of the Lid and Eyebrow.—Falling of the Lid, or Ptosis.—Single Ptosis.—Operation.—Result.—Double Ptosis.

Gentlemen,—I have yet somewhat to say on the surgery of the lids, and I shall endeavour to encompass it in this lecture. Cicatrices on the temple may pull away the lids from the globe of the eye, and, at the same time produce more or less eversion of them. Such eversion, or ectropium, must always be partial—it can never involve but a part of the lids, even in aggravated cases. The contraction may not be sufficient to evert the lids, but merely to pull them away from the globe, a condition less severe than that of ectropium; yet in its consequences it is the same, or nearly the same, and requires a like operation for its removal. To effect the operation, a piece must be taken from the corner of the lids, by which enough of their cartilages will be removed to allow them to be brought together, so as to resemble their natural condition. The most convenient manner of removing that bit will be, by cutting it in a triangular form, the apex of which will involve a portion of the skin external to the angle of the lids, and a great advantage of which is, that it leaves a wound the easiest to be adjusted. Sutures must be used—plasters are scarcely required.

Symblepharon, or adhesion of the lid to the globe of the eye, is an occurrence which cannot be called a very common one, although in extensive ophthalmic practice it is often met with. It is caused by the application of escharotics to the conjunctiva, and is nearly confined to persons whose occupations embrace the use of those substances. Burns and scalds, and mechanical injuries, will also induce it.

It would be a waste of time to describe the various forms that these adhesions assume, or the extent that they may occupy, and the positions into which the globe may be pulled.

With a few exceptions, all the cases of adhesions which have come under my notice have been produced by the action of lime. The contractions, which are always manifested slowly, are not necessarily the result of sloughing of the conjunctiva, and appear to be great in proportion to the original injury, and may occur when they are not expected. Be therefore guarded in your prognosis.

In two cases, I had the opportunity of watching the effect of lime in the eye from the commencement. In each the conjunctiva became considerably inflamed, except where the lime rested, which was white, or whitish, from the chemical action of the lime on its cuticle. That part then swelled; after that the epithelium peeled off in shreds, and then the contraction began.

The treatment of these cases is indeed most unsatisfactory; whether an attempt at alleviation be admissible, must depend on the extent of the adhesion, the detriment it occasions to the functions of the eye, and the state of the cornea; for, if that be opaque, and the entrance of light to the eye obstructed, the question of operating should not be entertained, except under such circumstances as, Dr. M'Kenzie remarks, may lead us to operate altogether independently of any hope of restoring sight; such, for instance, as to relieve the painful feelings of dragging in the eyes when the patient looks from side to side, and which restrains, in some measure, the exercise even of the sound eye.

But the great practical, and, after all, the important consideration to which the subject should be submitted, is, to what an extent can an operation be serviceable? My own experience, which seems to accord with that of others, obliges me to say, that it is very seldom, out of numerous instances of operation, that any good has been got by it. I have arrived at the conclusion, that but very few of these cases should be meddled with; that interference is perfectly useless when the adhesion is extensive, and perhaps, also, even when there is slight or limited adhesion, if the proper tissue of the conjunctiva, with the subjacent cellular tissue, have been destroyed, and bands of lymph form the connexion.

I have operated many times under what appeared to be favourable conditions, and removed the bridles, and yet the connexion has returned to the same, or even to a greater extent. In but a single instance have I been successful, or, I should say, partially successful: in that case, the adhesion, which tied the centre of the lid to the globe, was slight—that is, narrow; it was also loose and soft. The injury to the conjunctiva must have been slight. I merely divided it, and on each occasion it relapsed to its former state, in spite of all endeavours to keep the surfaces apart. Various substances have been employed by surgeons for that purpose, including even plates of metal, but in vain. Then I removed a thin central bit, the cicatrix, as it appeared to be, of the band, and brought the edges of the cut surfaces, on the lid and on the globe, severally together, by sutures. The last time I saw the patient, many months after the operation, there was but a slight contraction at the lower part of the interior of the lid, where the conjunctiva is reflected from the globe to the lid,—a spot where the contraction would, I suppose, return under any plan of treatment.

I suspect that the method I adopted is the only one that can be depended on for amelioration, and that when the edges of the conjunctiva cannot be brought together easily, and retained by sutures, for adhesion to take place, no benefit can ensue.

ANCHYLOBLEPHARON.

The lids may adhere together by their edges, either in part or in their entire extent. It is said to be sometimes a congenital defect. When the result of disease, doubtless the edges of the lids have ulcerated, and the granular surfaces been united; but this must be an occurrence of great rarity. Occasionally I have met with such union when the eye has been lost, one disease producing both effects; the collapse of the globe places the lids in a favourable position for such union. Where it is supposed that the globe is healthy, and not adherent to the lids, an operation may be undertaken. Generally there is a small opening at one or other of the commissural points, through which a director may be introduced, and used as a guide for the scalpel or knife with which the lids are to be divided. Should there be no aperture, one is to be made while the lids are raised, or pulled away from the globe. Any intervening membrane that may exist between the edges of the lid must be carefully removed. Some contrivance must be resorted to for keeping the cut surfaces from coming together, especially at their corners. Gold-beater's skin might answer well; perhaps brushing them over with collodion would be still better.

The treatment of wounds and contusions of the lids I shall pass over, because it falls entirely within the principles of general surgery.

HYPERTROPHY OF THE SKIN OF THE EYE-LID AND EYE-BROW.

I have ventured thus to designate an affection of the lid and brow, of which I have met with two examples. In one of them only was I professionally concerned, having been consulted on it; and afterwards I assisted with the operation that had been agreed on. The historical particulars of it I have forgotten; it occurred six years since; but its physical properties I remember tolerably well. I endeavoured to obtain an accurate account of it, but I have failed.

The whole of the skin of the right upper lid, and the outer part of that of the brow, and a portion of that of the temple, was swollen into a mass that hung over the eye, and nearly concealed it. The weight of it closed the lid, and prevented its being opened by natural efforts. A considerable portion of it, namely, all that was pendulous, was circumscribed by eliptical incisions made transversely, and removed. There was very active bleeding, and several sutures were required. The result was satisfactory, the deformity was greatly lessened, and the lid could be raised sufficiently for the eye to be used.

The pathological appearance of the mass, as far as I can remember, was like the sarcomatous thickening and enlargement of the scrotum, which takes place in hot climates, being a hypertrophy of the skin and the subjacent cellular tissue.

FALLING OF THE UPPER LID, OR PTOSIS

Is an affection that may be considerably benefited by surgical treatment; but surgery should be kept in abeyance till medicine has been tried, except when it is congenital, or results from mechanical injury to the lid. Interesting as it would be to me to go into the subject of ptosis, physiologically, pathologically, and therapeutically, I must refrain, and confine myself to the bearings that practical surgery has upon it.

When the ptosis is confined to one eye, and there co-exists eversion or turning out of the eyeball from paralysis of the muscles supplied by the third pair of nerves, it is not prudent to operate, on account of the double vision that would ensue; but when there is no such objection, and when there would not be confusion of vision from other causes, an operation would not only improve the personal appearance, but, in proportion to the quality of the vision of the eye, restore its functions.

SINGLE PTOSIS—OPERATION—RESULT.

A young woman, aged 22, applied to the Central London Ophthalmic Hospital, Jan. 7, 1847, with ptosis of the left eyelid. It had existed, according to her account, from childhood. The lid fell over the eye and completely closed it. In other respects, the eye was to all appearance healthy; but the vision of it was slightly impaired, being a little misty. I dissected off a large semilunar piece of skin from the lid, the extent of which will be better understood by describing the range of the preliminary incisions. The upper one extended from within a quarter of an inch of each angle of the lids upwards in a curve to within about an eighth of an inch of the eye-brow; the lower one was across the lid, and met the other at its extremities. In three days the sutures were removed. I did not see the woman till a year after. The success of the operation was, to use the words of my case-book, "perfect," but it is too strong a term unless it relates to the fulfilment of all that could be *expected* from it. There was but a faint mark of the wound, just enough to be perceived by careful attention. The lid could be raised to the same height as its fellow, and, when closed, differed only from it in not descending so low—the lower lid rising a little to meet it—and in the edge being straight, and not curved.

The amount of skin to be removed must depend upon the circumstances of the case—whether the ptosis be entire or partial; also on the looseness or tenseness of the brow—for it is through the action of the occipito frontalis muscle that the lid is to be elevated. The skin should be dissected off superficially, and the orbicularis palpebrarum muscle left entire, and especially the thick ciliary portion of it, or the power of closing the lid will be endangered, for that muscle is called on to exert greater action than is ordinarily required of it.

This drawing is a representation of the eye eighteen months after the operation.

DOUBLE PTOSIS

Is rarely met with. The only instance in which I have operated on both eyes, was in the person of an old woman, aged 64, sent to the hospital by Mr. Hamilton, one of the governors. There seemed to be a feebleness, rather than paralysis, of the levator palpebræ muscles, for, with great effort, which she could not long maintain, each lid could be slightly raised. To be enabled to move about, or use the eye for any purpose, it was necessary to keep one of the upper lids raised with the finger. Independently of the great inconvenience and misery of such a state, her manner of opening the eye gave her a most farcical and prying appearance. I removed less skin than in the case just mentioned, and relieved the poor old woman from her distressing condition.

The next Lecture will be on Tumours of the Eye and its appendages.

ORIGINAL COMMUNICATIONS.

THE INFLUENCE OF CHEMISTRY IN THE ANIMAL, VEGETAL, AND MINERAL KINGDOM.

By Dr. SHERIDAN MUSPRATT,
Professor of the Liverpool College of Chemistry, &c.

I will commence with a few remarks upon the necessity of a practical pursuance of chemistry, which has, of late years, so rapidly progressed, and which can muster in its ranks some of the brightest intellects that have ever graced the world. Chemistry is a science that can only be learned in the laboratory. We may obtain an insight and a very fair knowledge of nearly every other science by lectures and books; but with chemistry this is impossible. The most minute description of an experiment given to the student in a lecture or treatise, does not secure him from numberless difficulties which present themselves on his attempting to perform it; and this is more particularly the case with manufacturing processes. Let a person peruse over, and over, the description of the fabrication of soda, gas, and sulphuric acid. Nevertheless, when he attempts to imitate it, even on a small scale, he will find himself beset with a host of obstacles almost insurmountable, which can only be overcome by months of diligent inquiry and manipulation. The absurdity of the supposition, that a knowledge of chemistry can be obtained from practical lectures must be apparent,—as well might I construct a delicate mechanical apparatus from hearing or reading its description. This at once proves that the laboratory is the only place where an intimate and beneficial knowledge of the science can be obtained; for the pupil has repeatedly in view, besides his investigation, a variety of processes which are being constantly carried on; and from which he may, in fact, derive more benefit than from his own experiments: having on all sides a boundless territory of research. Chemistry has been justly pronounced a mine pregnant with inexhaustible wealth, and its ramifications are accessible to all who have the opportunity and industry to explore them. Experimental study, supplanting mere speculative philosophy, is working miracles on all sides. Every day now is fertile in discoveries. Industry is in a state of perpetual progression, owing greatly to the labours of the chemist. I affirm, and my readers will no doubt coincide with me, that in no previous epoch in our world's history has every branch of industry undergone so complete a revolution as that which the last half century has accomplished, and this, in no small measure, indebted to the science upon which I am dilating. Were we to estimate the value of a science by its utility,—a standard by which it ought certainly to be judged,—in the foremost rank we must place chemistry. The chemist is not the benefactor of a class, but the benefactor of a nation; for he wrests from their hiding-places the most precious secrets of nature, and turns them to practical and successful results; while the analyst opens to us the constituents of waters and substances, and proves upon which ingredient their effects mainly depend. When analysis reveals to us the composition of a mineral water, we may readily produce it with all its qualities,—a fact sufficiently well established by the number of factories of mineral waters in all parts of the kingdom; and, when we are positively able to distinguish the ingredients actually efficacious in a water, we can prepare a much more active mixture than the native spring. We now employ iodine, instead of waters, in indurations and struma. It was the light of science that enabled us to connect certain effects on the human body with certain elements in the waters, and, as I have just stated, led us to the one active element alone. It would not do for me, as we are discussing analysis and its power, to pass over the artificial formation of ultramarine, which, according to a distinguished philosopher of our time, is the most brilliant and conclusive achievement of inorganic chemistry. Gmelin's analysis of lapis lazuli showed it to consist of silica, alumina, and soda, —three bodies destitute of colour; with sulphur, and a trace

of iron. Nothing could be discovered in it that would account for its deep azure tinge. From this it might have been supposed that the analyst was wrong, and that its artificial production was impossible; but the thousands of pounds weight which are now manufactured proves the accuracy of the analysis, for the ingredients are combined in the proportions determined by Gmelin. We will now glance at agriculture, the most important branch of human industry, and descant for a short time on the enormous benefits it has received from science. In 1840, when Liebig's work on agriculture was first published, persons talked of guano as *a rare curiosity*, but when the views of the illustrious German were spread, and disseminated, its use became general. We now employ that manure to enrich and fertilize our own soil, which has been the excretions of millions of seabirds for thousands of years. The farmer has obtained incalculable assistance by tilling the soil on scientific principles. It is now an admitted fact, that to keep up the fertility of the soil, we must restore to it those inorganic matters removed from it in the crops; and the most striking illustration of the advantage agriculture has derived from chemistry is the success that has attended the search for mineral manures. Large quantities of phosphate of lime have been discovered since our attention was directed to its importance; and by mixing it with sulphuric acid it is reduced to such a state, that it can be most easily assimilated by plants of the most delicate structure. This beautiful prescription of science provides an immensity of food for the vegetal kingdom, at a very moderate cost. Chemistry has proved to us the loss that takes place in all our farmyards, and the waste of valuable matter swept away in our rivers. This has forced companies to start up for its collection. All recrements of a fertilising nature will in time be carefully collected and applied to the fields; and as science advances, the results of our lands will be calculated with as much certainty as those of our laboratories. The most striking instance I have to offer of the ultimate truth of the preceding, is some experiments that were performed by the Rev. Mr. Huxtable, at Sutton, Waldron. The problem he sought to solve was the following:—Can we, by supplying to the soil the constituents of a plant, cultivate that plant on any land, however in itself sterile? He selected for the purpose of his experiments about five acres of the most barren and unlikely soil in his neighbourhood—a soil that, to grow swedes upon, was regarded as impossible by the farmers in his district. Chemical analysis pointed out to him, that to produce 20 tons of bulbs and 5½ tons of tops, nearly 5 cwts. of inorganic matter, consisting of 146lbs. of potassa, 76lbs. of soda, 69lbs. of sulphuric acid, 30lbs. of phosphoric acid, 103lbs. of lime, 22lbs. of magnesia, 23lbs. of chlorine, and 23lbs. of silica would be required; as well as a certain amount of organic matters, consisting of ammonia and carbonic acid. A mixture of the above was made, and the issue of the experiment exceeded the rev. gentleman's most sanguine expectations. This shows, that with a skilful employment of labour, reliance on the principles of chemistry, and adequate capital, there is no soil, how poor soever, which will not abundantly repay the costs of cultivation. The whole human race is particularly interested in the scientific progress of agriculture, for so great an amount of the fixed capital of the civilized world is employed in the cultivation of the soil.

In the animal kingdom we have every reason to believe that ultimately it will resolve the most exalted problem with which the human intellect can be engaged—the laws of vitality. What an enormous amount of empiricism has it not dispelled from the healing art? In the words of a talented chemist—that invincible weapon analysis has cut through the mantle of prejudice and error in which the medical agents of the art had been so long enshrouded, the true ingredients and offices of the various parts of food have been disclosed by its all-powerful agency, and the constitution of the diseased and healthy organism has, in a great measure, been unfolded to us by its irresistible power.

We no longer drive a nail into the walls of our churches to stay the pestilence with which we are visited; we do not now believe that a particular drop of water is sufficient to arrest the progress of the plague. The accumulated rust of ages has, during the last half century, been dissipated by a Berzelius, a Mitscherlich, a Dumas, and a Liebig, aided by a host of eager scientific chemists in all parts of the world. They have been the grand pioneers, and through them more has been effected in fifty years than the crude experiments of a great many antecedent centuries had achieved. What great assistance has the fattening of cattle derived from the counsels of the chemist? But those counsels have not been confined to cattle alone; the principles of nutrition are now extended constantly for the benefit of the human race. Liebig, in his admirable work, "Researches on the Chemistry of Food," has the following very pertinent remarks:—"If we consider with some attention the facts which have been ascertained in animal chemistry, we shall be surprised to find how few among them, there are, on which conclusions can be securely based. The cause of this, as appears to me, is, that hitherto but a very small number, comparatively, of professional chemists have occupied themselves with the cultivation of the science, or have selected it as the object of profound and thorough investigation." The eminent German, with a few others, has sunk a new shaft in this direction; he has pointed out to us, after making grand discoveries, the manner in which our excavations should be made. We must hope that his advice will be followed, so as to enable us to strengthen and mature the rising generation, and still further to alleviate the sufferings from disease. The principles of physiology, laid down by this chemist, are daily tested, with advantage, in the wards of our infirmaries. With all his bold theories, he stands, as a distinguished Member of Parliament remarked, "the greatest man of his age." He is the directing spirit in organic chemistry, which *alone* places him in the most elevated rank among those who may be termed the benefactors of our race.

Let us now enter upon the mineral department, and the assistance afforded by science in chemical manufactures. In taking a brief retrospect of the vast progress the arts and manufactures have made during the last half century, our attention is at once directed, more particularly, to three branches, which stands out so conspicuously—I mean, coal gas, sulphuric acid, and soda. It is most interesting to trace the applicability of gas to its origin. The elimination of inflammable gases from the earth in various parts of the globe has been known for ages; the most familiar instance in this country being the fire-damp of the miners. Jets of flaming gases, bursting out from the ground, have attracted notice from a very early date; so that the savage tribes, owing to the grandeur of the spectacle, apparently unsupported by fuel, considered the spots whence such emanated as the abodes of their gods. The well-known holy fires of Baku still burn, and are due to the ignition of light carbide of hydrogen with some naptha vapour. They are worshipped by the savages in the neighbourhood of the Caspian Sea. In China, the borers for salt water often meet with streams of combustible gases, which they use for illuminating factories and evaporating brines; consequently, the Chinese were acquainted with the uses of coal-gas long before the knowledge of its application was acquired by Europeans. The idea of imitating the natural processes, and of employing the gases thus obtained for useful purposes, originated in this country nearly two hundred years ago. To Dr. Clayton, the Dean of Kildare, the honour is due of having first obtained gas from the distillation of coal. The gas produced by the distillation of coal is not uniform in its composition. Its illuminating constituents are light carbide of hydrogen and olefiant gas, but many other gases are evolved during the process, most of which tend to diminish the illuminating power; whilst others, such as ammonia and sulphide of hydrogen, are injurious to health. By the assistance of chemistry the composition of coal gas was elucidated, and the nature of its poisonous and useful ingredients ascertained. The chemist, therefore, gave, on this knowledge, means to the manufacturer for separating the deleterious compounds. By the process of purification, the cyanogen compounds, with the sulphide of hydrogen, ammonia, sulphurous acid, hydrochloric acid, and carbonic acid, are arrested. Scientific improvements are still going on with relation to gas works. From coal naptha a number of interesting oils have been lately separated, which have long been favourites with the cultivators of organic chemistry. Benzole, one of them, is so readily vaporable, that, when common air is passed through the tank containing this oil, it becomes so highly charged with carbohydrogen as to burn with a brilliant light. This, I have no doubt, will ultimately bring benzole into more general use. The consumption of gas is enormous. The following statistics give us an insight into the extent which this branch of industry has attained. In England 6,000,000 tons of coal are annually employed for the manufacture of gas, and from 12,000,000 to 15,000,000 pounds sterling

expended in its production. In London alone, 500,000 tons of coal are annually used, producing 4,500,000,000 cubic feet of gas, and 500,000 chaldrons of coke; of the latter, 125,000 chaldrons are consumed in manufacturing the gas, and the remainder sold for fuel. Upwards of half a million houses in London burn gas, and the length of the main arteries for conveying it is 1600 miles. The capital employed in the metropolis for the production of gas is 4,000,000*l*. The manufacture of coal gas for the purpose of illumination affords one of the most striking instances of the triumphs of science when enlisted in the divine cause of civilization. Looking at it as a whole, and regarding the ingenuity evinced in the construction of apparatus,—the chemical skill and beauty displayed in the process, and the very valuable purposes to which it is applied,—it forms one of the most beautiful, curious, and useful of our manufactures; and probably there is no subject of a manufacturing character in the present day which more engages public attention; coal gas having now become not a mere luxury, or even convenience, but an absolute necessary. In the words of my late colleague, "the extent to which the use of gas has affected the arts and manufactures in this country can only be conceived by those who are aware of its innumerable applications in the double capacity of giving heat and light. To our experimental chemists the benefits afforded by gas cannot be overrated, more especially in England, where the price of spirits of wine is so exorbitant. But for the use of gas in the laboratory, the progress of chemistry in this country must have been greatly retarded."

In speaking of the general influence of the manufacture of coal gas, it is impossible to leave unnoticed the number of hands daily engaged in raising whole strata of coal, in loading and navigating the fleets employed in conveying it, not only to the different parts of this kingdom but to foreign countries, which consume a larger quantity of English coal for the production of gas than is generally known. The extension of the gas enterprise produced a sensible effect on the iron works by the vast number of retorts, the stupendous gasholders, and the endless pipes required for generating, storing, and conveying it.

Several other branches of trade were also forced into increased activity, and even new trades sprung up in consequence of the extended use of gas. The substances produced in the purification of gas naturally attracted the attention of the gas manufacturer; and chemistry soon pointed out valuable purposes to which they might be applied. The oily matter which separates, as a secondary product, in the distillation of coal, yielded, when purified, in its more volatile portion, the most convenient solvent for caoutchouc; another part of it was found to be an efficient preservative of timber, and the pitchy residue formed the chief ingredient of an excellent substitute for the flag stones of our pavements, while the ammoniacal liquors were found useful in improving the fertility of land. Thus, after the lapse of countless ages, was the nitrogen of petrified fern forests resuscitated in the ammoniacal liquors of the gas works, to vegetate once more, and increase the produce of our corn-fields."

Soda and sulphuric acid belong to the products of chemical industry applied in its most extended scale. The amount of the former used has been stated to be a fair criterion of a nation's civilisation, and the quantity of sulphuric acid produced, in a country, is a good standard whereon to estimate its commercial prosperity. Sulphur is a most important element, but to the casual observer it is seldom regarded in this light. It is an essential ingredient of animal and vegetal fibrine, albumen, and caseine, consequently indispensable to animal and vegetal life. It is used to a very great extent, both externally and internally, in medicine, but its great importance is its conversion into sulphuric acid, of which article above 100,000 tons are now annually manufactured in Britain. Sulphuric acid is engaged for a variety of purposes; being the strongest acid we possess, it is employed to dispel other acids from their saline combinations. It is used, as I have before mentioned, in liberating phosphoric acid from bones; hence its importance in agriculture. Phosphorus is manufactured by its aid, which thus ministers to our comforts by substituting the convenient lucifer matches for the crude tinder-boxes of old. It is also employed in the manufacture of alum; the sulphates of copper, zinc, and potassa; in that of sulphuric ether; of sugar by the saccharification of starch; in the purification of gas; and in the new and beautiful refining process; also for generating hydrogen, for the oxyhydrogen blowpipe in cementing lead, doing away with the necessity of solder, &c.; but its vast consumption is in the conversion of sea salt into sulphate of soda for the manufacture of the "soda" of commerce. Soda has been used from time immemorial in the fabrication of soap and glass; two chemical productions employing and keeping in circulation an enormous capital; but its consumption at the present time in the manufacture of these two articles is immense—about 60,000 tons annually. The sea salt or chloride of sodium, of which about 100,000 tons are yearly consumed in the soda manufacture, is obtained from brine springs—the principal ones are in Cheshire. Brine was formerly evaporated spontaneously, but, as "necessity is the mother of invention," the salt is now crystallized, in quantities, from the brine by artificial means. The present method of making soda from common salt was discovered by Leblanc, but it was some time before the process was adopted in this country. At first the duty on salt checked the full advantage of the French chemist's invention, but when the government repealed the duty, and salt could be bought for ten or twelve shillings the ton, the production of soda has been constantly on the increase. Soap, instead of being a luxury, is now accessible to all; and glass, which used in ancient days to be looked upon as a gem, has now become a necessary of life. The amount of soap annually exported from Liverpool exceeds the quantity shipped in any one year from all the British ports previously to the conversion of common salt into the "soda" of commerce; and, moreover, in 1820, 9000 tons of barilla were imported into Great Britain; last year there was not one ton. Sulphuric acid is manufactured by burning sulphur in kilns, oxidizing the sulphurous acid formed with nitric acid., which process alone, led to the discovery of immense magazines of nitrates in South America.

The nitric acid is now exclusively fabricated from nitrate of soda, the nitrate of potassa being used in making gunpowder, and for the purposes of agriculture. One of the most glorious triumphs which chemistry has of late years accomplished, is the substitution of sulphur minerals in our country for the native sulphur of Sicily. Owing to the King of Naples exacting a duty of 4*l*. per ton on all the sulphur leaving his dominions, we rendered ourselves independent of Sicilian monopoly; and were we deprived of pyrites to-morrow from any cause, we would certainly discover a cheap mode of extracting sulphur from gypsum, a mineral largely distributed in all parts of the world. "This clearly shows that in industry and commerce every imprudence carries with it its own punishment—every oppression immediately and sensibly recoils upon the heads of those from whom it emanates."

The monarch of Sicily, finding the injudicious impost on sulphur almost destroyed the commerce of one of the most important provinces of his kingdom, has taken the export duty off sulphur; so that the quantity we now import is more than it was five years ago; and, only for the revolution in Sicily, sulphur would be as cheap as it ever had been. At present the price is high on account of a limited supply.

If the King had not interfered, of course the production would have increased in a greater degree, and the importation at present be nearly doubled. The artificial production of soda has given a new impulse to another flourishing branch of industry,—bleaching by means of chloride of lime. The muriatic acid, evolved during the conversion of chloride of sodium into sulphate of soda, has until lately escaped into the air, but now it is to the interest of the chemist to collect it, and to mix it, in stills, with peroxide of manganese. By this process it yields up its chlorine, which is conducted into chambers, to be absorbed by lime, forming bleaching powder now shipped in casks to all parts of the globe.

I have endeavoured in this paper to show the influence of chemistry in the animal, vegetal, and mineral kingdom, by selecting prominent examples in each department. Improvements are continually being made in this noble science, and every discovery in it tends to bring forth fruits of universal usefulness. The connexion between medicine and chemistry is daily becoming more intimate, and, consequently, much may be expected from their amalgamation. The miner and metallurgist are continually seeking the assistance of the chemist, and availing themselves of the results of his researches; and that valuable instrument, the blow-pipe, is now an unraveller of some of their most difficult problems. Pharmacy is improving, owing to its followers

assiduously cultivating chemistry; and with reference to the important subject of medical jurisprudence and toxicology, it seems sufficient merely to advert to them to suggest immediately to the mind the most cogent reasons for cultivating a science, without which we must be incompetent to afford assistance in cases of emergency, or to detect accident or crime whenever the life of a fellow creature has been sacrificed, or is at stake. Chemistry qualifies us to detect adulteration and imposition; and, in short, is so palpably essential that no man can nowadays be considered a properly educated "chemist and druggist" who is not sufficiently versed in it to be able to give a satisfactory account of the articles in which he deals. Lastly, "the searching into the works of Nature, while it delights and enlarges the mind, and strikes us with the strongest assurance of the wisdom and power of the Divine architect in framing for us so beautiful and well regulated a world, it does at the same time convince us of his constant benevolence and goodness towards man."

THE CHOLERA IN PLYMOUTH AND ITS NEIGHBOURHOOD IN 1849.

By Dr. EDWARD T. ROE,
Plymouth.

[Continued from p. 197.]

It has been already shown that the first case of cholera in Plymouth, was on June 5th; and that, on the afternoon of the same day, the American Eagle, an emigrant ship, bound for New York, put into the Sound for medical assistance as, on her passage down Channel, cholera had broken out on board.

She left London on the 31st of May, and Portsmouth three days later, with 300 passengers, of which number twenty-one had been attacked, seven of whom were already dead, and the premonitory diarrhœa was almost universally prevalent. Two Government hulks were immediately lent by the port admiral, and the crew, with most of those in the steerage part of the vessel, drafted into them, while some others and the cabin passengers took lodgings in Plymouth. Nine died in the hulks, but none of those who removed to the town had the disease. On the 20th, the ship having undergone thorough purification, again received her living freight and sailed for New York. She reached her destination without experiencing a return of the epidemic.

The next case of cholera in Plymouth was on the evening of June 8th, when an Irish emigrant was landed from a Cork steamer and conveyed to a small public-house in Stonehouse-lane, where he died on the following evening. This event, coupled with the fact of our having the disease in the Sound and in a neighbouring village, naturally excited the strongest apprehensions that we should not escape the visitation; and the conviction, therefore, was forced upon us, that every possible preparation must be at once made for its reception; consequently, on June 12th, a resolution was passed by a Committee of the Board of Guardians, that a Board of Health should be formed, which was carried into effect on the following day, by the appointment of fourteen guardians and the magistrates of the borough. On the same day (13th) the first meeting of the new Board was held, W. T. Harris, Esq., the governor of the Court of Guardians, in the chair, when it was "resolved that the town be divided into districts: each district to be placed under the superintendence of a visiter or visiters, to be appointed by the Board, who shall be requested to visit the streets, lanes, and alleys of the town, and also the dwellings of the poor."

On the afternoon of the day that this resolution was passed, Mrs. Blackler, the wife of a baker, was seized with cholera immediately after a hearty dinner of baked meat and potatoes, and at 3 p.m. on the following day she died. Her shop was much frequented by Noss fishermen, several of whom had been there a few hours before she was taken ill, and one had with him a bundle of bed-linen, which he had brought from Noss, probably with the intention of trying to raise money upon it, as they were in a distressed condition.

The next cases are associated with the history of a drover named Kitto, who, on June 16, being then quite well, left Plymouth for Modbury to bring home some bullocks. On the 17th, when returning, he met, near Yealmpton, a man very ill with the symptoms of cholera, who was then coming from Noss for advice. At Brixton, Kitto went into the public-house, where he encountered another man from Noss, who was describing the horrors of that place, which he had left not an hour before. The drover, feeling alarmed, took his departure, but had not proceeded with his cattle more than three miles before he became violently purged, had nausea, and reached his home in Stonehouse-lane,(a) with difficulty, at four p.m. The diarrhœa continued, and was very severe on the night of the 21st. On the 22nd, he was ordered to proceed by the coach to Wadebridge, and was frequently obliged to get off from vomiting and purging. He commenced his return home the same night. On the 23rd, he got to a farmhouse near Liskeard, and, on the morning of the 24th, proceeded on his road to Plymouth, but, after having lain down by the hedge side several times from exhaustion produced by the discharges, he gave up all hope of bringing on his cattle, and left them at a farm six miles distant. Rest, for a short time, and some brandy rallied him, so that, late in the afternoon, he succeeded in reaching his home, but remained too ill to work for a week after.

An hour before he returned, his wife was seized with violent headache, a symptom which subsequent experience showed to be the frequent precursor of cholera; in the evening and night she had profuse diarrhœa, which caused frequent syncope. On the 25th vomiting ensued, and continued for four days; she attributed her illness to attendance on her husband on the night of the 21st. On the 26th their son, aged 17, came home from work with severe diarrhœa, which continued all night, and towards morning was accompanied by cramps. He soon got well.

At seven p.m., June 28th, their youngest child, four years of age, was suddenly attacked with purging, then vomiting and cramps, and died at seven a.m. the following day, and a child called Kittley, of the same age, living in the same court, and who had been playing with the little Kitto all the day, was taken ill a few hours later on the same night (28th) with a similar train of symptoms, and died at ten a.m. on the 29th. No medical man attended these children.

The fifth case was on July 3rd, in Union-street, one of our chief thoroughfares; and from the circumstances connected with it, the deepest interest was excited. It appears, that the drainage of some houses, and the course of the waste water of the town, were impeded by an arch of the railway, which had been thrown across the street a few months before, and that, in consequence, those houses which were situated nearest the arch, and with the leat in the rear, had the drainage and waste water thrown back upon them; their kitchens and cellars frequently became flooded, and, even when there was not sufficient sewage to enter the houses, it invaded the yards, and left there a green slimy matter. Notwithstanding various energetic remonstrances to the authorities, this state of things had, principally from engineering difficulties, been allowed to continue for at least 8 or nine weeks, and had not been productive of sickness; but as soon as the weather became warm a stench was perceived, which increased to an intolerable degree, and then cholera manifested itself.

On July 3rd, a child three years old was attacked with the epidemic, and died in 24 hours. The house where this occurred, had no cellar, but the kitchen was frequently flooded, and an extremely offensive smell pervaded the entire premises. On the 7th, a young man living at a pastrycook's, five doors distant from the house where the child died, went into the cellar, in order to obtain a sample of the sewage that had found its way there, for the purpose of showing it to the magistrates; cholera immediately ensued, and he died the same evening, after an illness of 13 hours.

On the 8th, another death took place in the house where the first case occurred, and the sister of the occupier had a severe attack, but recovered.

On the 7th, a servant girl, aged 14 years, living in an adjoining house to the pastrycook's, had diarrhœa, and went to her home in King-street. On the morning of the 8th she was better, but while at dinner was seized with cholera, and died in 17 hours.

There was another case of cholera at the pastrycook's, on the 14th, but the patient recovered.

We must now return to Stonehouse-lane. On July 4th, a woman named Burch, living in Stoke-lane,(a) had a very severe attack of cholera, but recovered.

On the night of the 5th, Sarah Woodley,(a) the wife of a pensioner, was attacked with cholera, and, although a delicate and even sickly woman, she lingered, collapsed, until the

(a) *Vide* map.

9th, when she died. On the morning of the 7th, a man called Clifford(a) was taken ill, and died, and was buried on the 8th. At 10 p.m., on the 8th, Sullivan,(a) a labourer, of quiet sober habits, became suddenly prostrated by cholera, and died in twelve hours. On the 9th, a child called Kelly,(a) who had been with Clifford, and followed him to the grave, was attacked, but recovered. At 6 p.m., on the 9th, a child of the name of Green,(a) was taken with the epidemic, and died at 4 a.m., on the 10th, without being seen by any medical man.

On the night of July 9th, the great outbreak in Stonehouse-lane took place, and between that time and the 17th, there were sixty-one deaths in a circle, the diameter of which did not exceed eighty yards. The inhabitants of that dismal and death-struck place were chiefly Irish of the lowest and most degraded class, herded together like cattle,(b) ragged, half naked, and inconceivably filthy; dead to all proper feeling; even the scenes around them made no good impression, for they stole the spirits and everything they could lay their hands on; even the blankets from off the dying. Situated as they were, in small, close, overcrowded rooms, it was impossible to afford the assistance their necessities demanded, and the difficulty was increased by the determination of the living to retain the dead for the sad but noisy obsequies of their country and religion.

While this was going on, none in the town would receive those who desired to fly from the infected place, and, when the attempt was made, the fugitives were, if discovered, driven back to the scenes of death whence they had in vain endeavoured to escape. This feeling was manifested even in those parts of Stonehouse-lane which the cholera had not, at that time, invaded, and where the proprietor of a lodging-house was threatened to have his house torn down about him if he did not turn out two poor creatures who had hastened from the pestilence, and sought shelter with him: reluctantly he complied, and I saw them hooted back to the plague-spot whence they came.

The dispersion of the inhabitants of this district to the adjacent fields, and the neighbouring towns and villages, however, rapidly took place, and by which means the disease was speedily extended on every side, as will be hereafter shown.

It immediately became evident, that the parish surgeon could not attend to the great increase of duty thus thrown suddenly upon him, and that the time had at length arrived for Plymouth to be put under the active surveillance of a medical staff; accordingly, on the morning of July 10th, a surgeon was sent into Stonehouse-lane, and three days after the whole town was divided into fourteen districts, which were allotted to nineteen medical men. This arrangement was confirmed by a resolution, passed by the Board of Health, the same day, when it was agreed that half a guinea should be paid for attendance in each case of cholera and choleraic diarrhœa, provided that not more than twenty such cases weekly were charged for in each district. The medicine was ordered to be supplied by druggists appointed and paid by the Board.

It was also arranged, that when a cholera hospital was established, two of the nineteen medical officers should be paid two guineas a day each for their services there, and in the district where it was placed, to the exclusion of any charge for individual cases.

To return to our painful narrative. In one week, 299 cases of cholera and choleraic diarrhœa occurred in Plymouth, nearly a fifth of which were fatal. In that scene of confusion few cases could be recorded, but the history of one family deserves a passing comment.

Eliza Stanford died July 12th,(a) and her friends refused to bury her until long after decomposition had been established. Of that family, consisting of nine persons, seven died; the brother-in-law of the girl, who was in the room at the time of and subsequent to her death, but who lived in the barracks, was the first marine that had the disease, and he also died.

In the house where Clifford died,(a) which subseqnently became the dead-house, but has now as many living occupants as ever, a whole family, root and branch, was swept away. The dead and the dying lay together in one small room, which was in so horrible a condition, that when the bodies were removed, the only way it could be cleansed was, by introducing the hose of a fire-engine through the window and washing all down stairs.

On July 15th, two tents, each capable of holding from twenty-five to thirty children, were erected in a field above Stonehouse-lane, and all the healthy children that could be collected in the neighbourhood were placed there.

In one week a cholera hospital was built in the same field, and continued open from July 18th until October 18th. No records exist of the number of cases admitted from its opening to the 27th of July, as the book in which the names were entered was stolen; but, during that time, 27 died there: from 40 to 50 persons were taken to it on the first day, and it is probable that 360 were received there altogether. From July 27th to the day of its closing, there were 298 admissions and 123 deaths. One nurse died; all occupying that situation were attacked more or less severely, and some twice.

The hospital consisted of 40 beds, (20 for each sex;) but the first few days it was opened many more were accommodated: afterwards the average number contained in it was 34.

The cholera clothes of the hospital were washed by a woman, 35 years of age and of dissipated habits; but she escaped all illness, which was perhaps owing to the articles having been always spread out in a field for twenty-four hours, and well sprinkled with Sir W. Burnett's disinfecting fluid before they were placed in her hands. When no precautions were used, the result was very different, as was shown in the case of a man called Vicary, who had been employed for a few hours on the 14th, in white-washing the houses and burning the clothes; the same evening he was seized with cholera, and died the following day at his home at the opposite and extreme end of the town.

Among the cases which excited considerable attention at the time was that of a gentleman holding the official situation of town-surveyor, who became the subject of diarrhœa five days before his death, while superintending the construction of a drain for the houses in Union-street, where there had been cholera on July 4th and 7th. On July 14th he was on horseback in Stonehouse-lane, directing where the fire-engines should be placed to wash the infected streets, and the night of the 19th was engaged in directing some repairs at the reservoir, when he got wet. The following day the diarrhœa passed into cholera, and on the 23rd he died.

Excluding the district of Stonehouse-lane there were from the 4th of July to the 17th, both inclusive, only 63 cases of cholera, 106 of choleraic diarrhœa, and 22 deaths, in Plymouth.

Words will but faintly, most inadequately, express the obligations the district of Stonehouse-lane and the whole town owe to the Sisters of Mercy, the Revs. G. R. Prynne, G. H. Hettling, and Mr. Joseph Beer, for their spontaneous, generous, and continued exertions in the cause of their suffering, dying, helpless fellow-creatures. Had they not acted as promptly and as nobly as they did, at a time when the rest of the town was unaware of the fearful spread of the epidemic, the loss of life must have been greater than it was. The vicars of the two parishes, the Revs. John Hatchard and H. A. Greaves, with their accustomed energy and ability, most zealously assisted in the good cause, as also did several other ministers.

The last subject I intend alluding to now is the *immediate* expense, caused by this awful visitation of cholera, to the town — *immediate*, as distinguished from the remote or contingent cost of supporting those who, having lost their natural supporters by the pestilence, are thrown upon the funds of the community, and form a very heavy ultimate addition to the rates.

The expense of erecting and furnishing the hospital and tents was 488*l.*, the materials of which were subsequently sold for 135*l.* The total cost of the hospital was 1500*l.*; deducting from this sum the 135*l.* realised by the sale, and allowing that 360 patients were admitted, each cost the town 3*l.* 16s.

This statement is, however, open to the apparent objection, that it is based upon a calculation which includes attendance and medicine for the district as well as in the hospital. But, before this is fully admitted, it must be understood that of the 360 patients in the hospital, 200 came from other districts than that in which it was placed, and that those 200 so sent were charged for by the medical men sending them as if they had been attended at their own

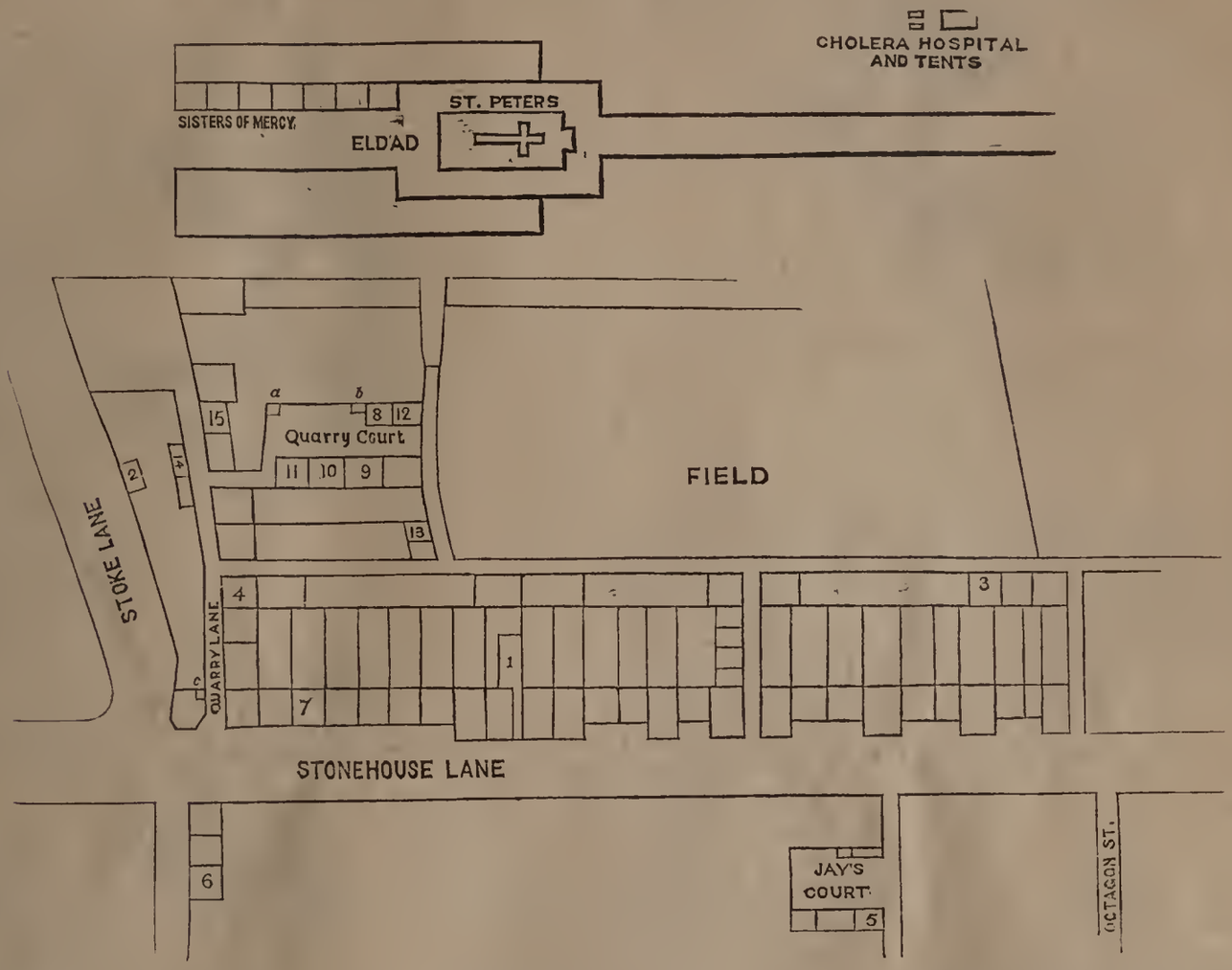
(a) *Vide* map.

(b) "One room, where sixteen persons dwelt, was only 8 feet 4 inches square, while another, where nineteen persons ate, drank, and slept, was only 11 feet by 9."—*Plymouth Journal*, July 19th, 1849.

homes. The 100 guineas thus charged may, therefore, be set against the cost of providing Stonehouse-lane district with attendance and drugs, which last may be estimated at 186*l*. The expense per head of the hospital cases, then, would be about 3*l*. 12s.; but as many more cases were often attended in the districts than twenty in one week, and as not more than that number were charged for, however many were seen, it may be unfair to make the deduction on the whole of the 200 cases; but, taking every circumstance fully into consideration, it may be safely assumed, that each case received into the hospital cost the town of Plymouth, on the average, 3*l*. 11s.

Excluding the hospital and its district, the average expense of each case of the epidemic for attendance was 9s. 2d., and for attendance and medicine 10s. 7d.; and for these together, with coffins, expense of burial, &c., 16s. 9d.

The total amount of the whole of the Board of Health's expenses during the cholera was 4415*l*. 19s. 7d.



1 Kitto and Kitley (the first cases.)
2 Burch.
3 Woodley.
4 Clifford and Murphy; afterwards the dead-house.
5 Sullivan.
6 Kelly.
7 Green.
8 Regan (the first case in Quarry-court.)
9 Stanford (seven out of a family of nine swept away.)
10 Bolan and Quinlan (seven died there.)
11 Kelly, the storekeeper, then and now the only Englishman in Quarry-court.
12 Crowley. Here an Irishman with only one leg had a very severe attack, and recovered. "Ah, shure! I would have died," said he, "if I had had two legs, for the cramps in the one kilt me quite." Poor fellow! he subsequently died of phthisis.
13 Rousell (one of the Stanford family) a pretty cottage, open to the fields.
14 Foreign musicians (many fatal cases there.)
15 Storehouse (Kelly's wife died there.)
a. Pump.
b. Privy.
c. Cesspit.

[To be continued.]

REMARKABLE CASE OF HARE-LIP.

OPERATION BY W. FERGUSSON, Esq.,

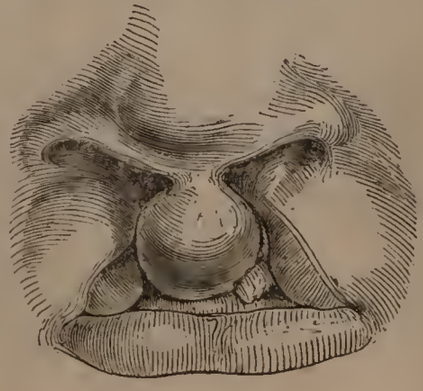
Professor of Surgery in King's College, and Surgeon to the Hospital.

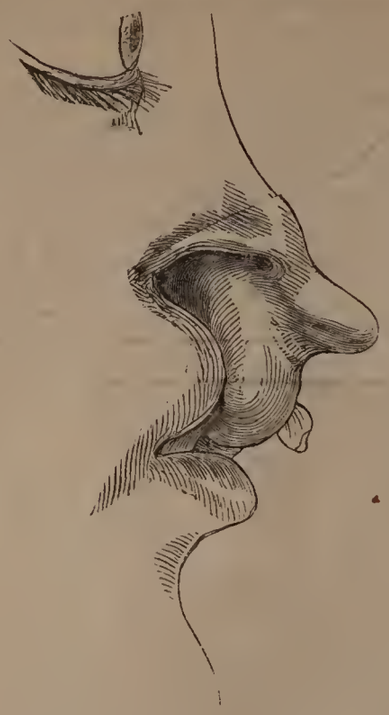
(Reported by Henry Smith, Esq., F.R.C.S.)

The following very unusual and remarkable case of deformity of the nose and lip, which has been entirely remedied by a most successful surgical operation, is, in my opinion, so extraordinary and interesting, that I have thought it worthy of record in the *Medical Times*; and, having obtained the permission of Mr. Fergusson, I shall relate the particulars of the case, and detail the steps of the operation, at which I assisted. I may add, that the annexed sketches of the parts, both before and after operation, which were taken by my friend Dr. Westmacott, are faithful representations of the original.

The patient was a little girl, aged seven, the daughter of a gentleman holding a high situation in a public office. She was lively and intelligent, and was just beginning to feel the effects of her deformity, which was as follows:—

There was an immense chasm, extending on each side right through the lip, the nose, and hard palate; and, in addition,





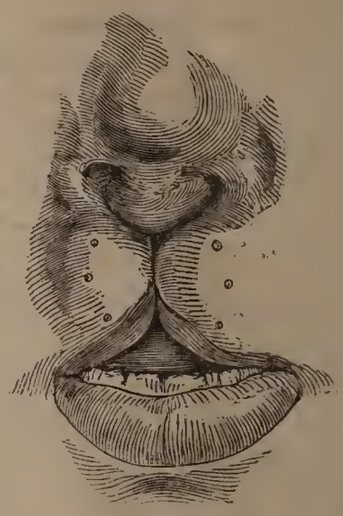
there was such a great and unusual projection of the bony palate,—as it were, isolated from the other portions of bone,—that the skin covering this prominence was directly continuous with that of the lip of the nose; a tooth was also projecting forward from this portion of the palate. The consequence was, that the poor little creature presented a fearfully unsightly object; so much so, in fact, that she was kept almost in seclusion; no one but her own family were in the habit of seeing her, and if she ever went out her features were concealed by a thick veil.

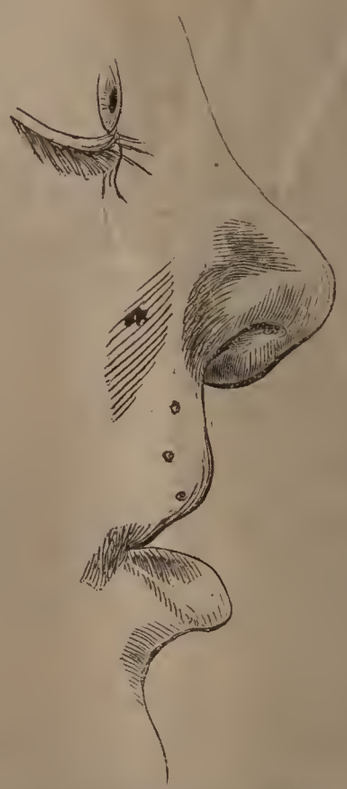
The child, when six weeks old, had been taken to a late eminent surgeon, who, at that period, recommended some operation, but the infant was too weak to undergo it. Subsequently, at a later period, when the patient was three years old, an eminent accoucheur was consulted, who advised the parents strongly not to have any operation attempted. Nothing therefore was done until the beginning of the present year, when our friend, Dr. M'William, was consulted about the case, and he recommended the child to be brought to Mr. Fergusson. After examining the condition of the parts, that gentleman at once determined to attempt to remedy this frightful deformity, by an operation which he performed in the following way, and which has fortunately proved to be perfectly successful.

The child was first placed fully under the influence of chloroform; and Mr. Fergusson commenced by dissecting up the skin covering the prominent bony palate. After this had been efficiently done, the projection itself was entirely removed by a pair of bone forceps. The edges of the integument, which had been dissected up, were now pared. After this the edges of the fissured lip were carefully pared, and they were accurately brought into contact and retained by hare-lip pins. The fold of integument which had been taken off from the projecting palate, and which was adhering to the lip of the nose, was now brought down, and its apex was inserted into the divergent space at the base of the cleft lip, and another needle was run through all, so as to keep the parts in perfect contact; in fact, so as to form a septum for the nose. The operation was necessarily a tedious one; but it was unaccompanied with much loss of blood or suffering on the part of the little patient.

The result of the operation was, that everything went on well; the pins were taken out somewhat later than usual, and sound union in every part had happily taken place, and the two views of the parts, which were taken some weeks after the operation, will show the vast improvement which has been produced.

Note.—Since writing the above, I have been able, through the kindness of Dr. M'William, and the courtesy of the parents, to see the patient. The improvement is even now more striking than it was just after the operation; and, in fact, is greater than is indicated by the sketch of the front view, which was taken just after the operation was performed. The notch in the lip is much less striking than it was at that period. Although so large a portion of the projecting bone was removed, and the chasm was so large, there is very little depression of the upper lip; so that, when a profile view of the child's face is seen, and the muscles of either lip are simultaneously put into action, as in laughing, it would be difficult to ascertain that anything had been done.





TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

Licentiate of the Royal College of Physicians, Professor of Pathological Anatomy in University College, London, and Assistant-Physician to University College Hospital.

[Continued from page 439.]

THIRTEENTH PAPER.

Age.—When speaking of the influence of age on the prognosis in typhus fever, I stated that the mortality from

that disease between the ages of six and fifteen years was exceedingly small; this is far from true with respect to the mortality from typhoid fever; for about 25 per. cent. of those suffering from the latter, whose ages lie between six and fifteen years inclusive, die.

Of nearly 400 individuals suffering from typhoid fever received into the London Fever Hospital, three only have been more than fifty years of age; the ages of these three individuals were respectively 51, 55, and 55 years. Two of them were women, one a man. A brief account of the latter case is contained in the present paper. The fact that typhoid fever is very rarely observed after the age of fifty, has been confirmed by every observer of the disease.

My impression is, that the rose spots of typhoid fever are more frequently absent from patients more than thirty years old than from those of less mature age. I should say they were rarely absent in young persons. This is, however, the reader must remember, merely a general impression. I have in the third of these papers proved the reverse to be true with reference to typhus fever.

Case 37.—John A., aged 55, a labourer, was admitted into the London Fever Hospital, June, 1850, under the care of Dr. Southwood Smith. John A. was said to have been taken ill about ten days before his entrance into the hospital. He had been delirious for three days before he came under observation. His illness began with loss of appetite, pain in the abdomen, and diarrhœa; he had from five to six stools daily before entering the hospital. On admission all delirium had ceased; the expression of his countenance was natural; his tongue was dry, red, furred in the centre, and fissured; abdomen full and soft; his pulse was 84; sonorous râle was heard over the whole chest; the skin was cool; several rose spots were noted on the abdomen, and a few on the back. On the following day his mind was observed to be confused. He was convalescent by the 1st of July.

For these particulars of the case I am indebted to Mr. Birkett, M.B. Lond. I saw the man repeatedly, but did not take any notes of his case. The rose spots were exceedingly well marked; fresh spots appeared every few days. In themselves, when well marked in character and course, they are absolutely diagnostic of typhoid fever; but when conjoined, as in this case, with the delirium, followed by slight mental confusion, red and dry tongue, and diarrhœa, the most sceptical must admit the patient offering such a combination of symptoms to be labouring under typhoid fever.

Case 38.—Without known cause in a child aged 11 years. Headache—delirium—weakness—vertigo—loss of sleep—flushing of cheeks—anorexia—diarrhœa—furred tongue—fulness, resonance, and slight tenderness of abdomen—a few rose spots—muscular tremors—general and physical signs of bronchitis and pneumonia—death on about the 30th day of disease. *Examination of the body about thirty-eight hours after death.*—Marked cadaveric rigidity—slight excess of serosity beneath arachnoid—some serosity beneath mucous membrane of arytæno-epiglottidean folds—ulceration of Peyer's patches in the last 14 in. of the small intestines—slight enlargement of the mesenteric glands—spleen rather large—double lobular consolidation of lung—lymph on pleuræ.

Ellen H., aged 11 years, an inmate of the School of Discipline, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Dec. 14, 1847; a moderately stout, fair child, said to have had fever and small-pox three years before she came under observation; had enjoyed health for two and a half years.

Without having been exposed to contagion or other known exciting cause, E. H. was attacked with headache; gradually she grew decidedly ill, so that she took to her bed one week before admission into the hospital. Delirium was reported to have commenced on about the 11th day of her illness, *i. e.*, 11th December. No farther history could be obtained.

On the 15th day of disease the following notes were made:—Has slept but little since admission, (*i. e.*, twenty hours.) General headache; vertigo; was very delirious and restless during the night, leaving her bed several times without purpose; memory defective; does not know how long she has been in the hospital; strabismus (natural;) slight impediment in speech (natural;) no flush; expression natural; no injection of conjunctivæ; she quits her bed (*i. e.*, when not delirious) unassisted, but with some difficulty.

Tongue moist, furred, pale, large; much thirst; no appetite; swallows with ease; no stool; (the bowels acted yesterday before admission;) abdomen full, resonant; no tenderness of belly; no gurgling in iliac fossæ; pulse 120, weak; cough rather troublesome; no expectoration; sonorous râle over both sides of the chest, mixed with some mucous râle. The mucous râle is very abundant at the base posteriorly of both lungs; and, in that situation, the mucous râle is mixed with fine crepitation. The skin is hot and dry; there are two imperfectly marked rose spots on the abdomen.—A saline mixture every six hours.

On the following day the headache was more severe, and limited to the forehead. She had slept but little, and that little had been disturbed. A fresh rose spot had made its appearance; the vertigo had increased, and the child was unable to stand without assistance. The stools—three in number—were watery. The left cheek was flushed. Abundant sonorous and mucous râles were heard over the whole chest. The mucous râle was mixed with much fine crepitation from the extreme base of the right lung to a little above the inferior angle of the scapula. There was some want of resonance in the same situation. During the succeeding night she left her bed frequently; her mind at the time evidently wandering; she had but little sleep.

From this time, till her death, on about the 30th day of disease, her pulse varied from 120 to 130. On the 22nd day it was too feeble to count, and continued so the two following days; but, on the 25th, it was again perceptible—120; the 26th day it was 130; the 27th 120; and from that time, till her death, was too weak to be counted.

The delirium continued from the day of her admission till that of her death—its character unchanged. Thus, the day before her death, she was noisy, screamed violently, and, even on the day of her death, attempted to leave her bed. The want of sleep was marked even so late as the 27th day, at which time it was noted that she did not sleep more than five minutes at one time. On the 28th day somnolence commenced, and continued till her death, except when interrupted by delirium.

The spots, never very perfect in their character, continued to make their appearance till the 25th day.

The tongue moist, furred posteriorly, dirty white, large, and its mucous membrane, as seen at the edges, pale, on admission, was moist and nearly clean on the 25th and 26th days; very tremulous on the 27th; dry and slightly furred on the 28th; and, finally, dry and brown the last two days of life.

The stools, of which two or three were passed daily, were watery. On the 22nd, one was passed into the bed: and after the 26th, all the fæces and urine were passed unconsciously into the bed. The abdomen, from the first, was full and resonant. At no time was there any marked tenderness nor gurgling. Prostration increased on the 27th; the muscular movements were very unsteady, and she was evidently much weaker than before. On the 28th, she lay on her back with her knees drawn up, and with a marked expression of prostration. A circumscribed pink flush was occasionally observed on the cheeks, one or both. The cough continued throughout. The respiration was counted on the 25th and 28th days only; it was then 36 in the minute. The abnormal physical signs became daily more marked and extensive, so that, on the 24th, mucous râle, mingled with fine crepitation, was audible over the whole right side of the chest; and there was some want of resonance, on percussion, over the same extent; the left side presented similar physical signs. On the 28th, the heart's sounds were inaudible, from the loud and abundant mucous râle emanating from the portion of lung overlapping that organ.

The chest was not examined the last two days of life.

No miliary vesicles were observed at any time.

She sank gradually, the breathing becoming more rapid and noisy, and the drowsiness more profound, and died at 7½ p.m. on (about) the 30th day of disease.

The body of Ellen H. was examined about thirty-eight hours after death; the weather was intensely cold and dry. The following notes were taken:—

Cadaveric rigidity well marked.

No distension of abdomen.

Head.—Some colourless serosity beneath arachnoid—no marked injection of pia mater—most depending veins very full—arachnoid and pia mater removeable from surface of

brain with tolerable facility—red points on cut surface of white matter rather numerous—substance of brain, including fornix and septum lucidum, normally firm—grey substance rather dark—very little serosity in the lateral ventricles—vessels of plexus choroides moderately filled with blood—base of the brain healthy in all particulars—cerebellum normal—about half an ounce of serosity colourless and transparent in the cavity of the arachnoid at the base of the brain. Specific gravity of the white matter, 1·042 ; of the grey matter, 1·032.

Pericardium healthy ; contains a little transparent yellow serosity.

Much dark grumous and fluid blood escapes on dividing the large veins at the base of the heart.

Heart healthy ; a large, firm, smooth, yellow clot in right auricle and ventricle.

Epiglottis and arytæno-epiglottidean folds thickened from effusion of serosity beneath the mucous membrane.

Larynx.—Mucous membrane pale and healthy in aspect ; no fluid in either pleura.

Left Lung.—Weight, nine ounces. The pleura covering the inferior lobe is thickened, dark red, and readily separable from the pulmonary tissue. A few old adhesions unite the lung to the costal pleura ; a little recent yellowish lymph fringes the base of the lower lobe. The lung is pale anteriorly ; dark pinkish violet posteriorly—the latter hue gradually passing into the former. The inferior three-fourths of the *superior lobe* are emphysematous ; the line separating the emphysematous from the non-emphysematous portion is irregular but well-defined. The anterior inferior edge of the same lobe feels solid and knotty ; it is very pale. On section, this solid portion is found riddled with small cavities. The greater number of these cavities contain purulent-looking fluid ; their internal wall is smooth and pale ; the thin layer of tissue separating them from each other, pale, tough, non-aërated. The largest of the cavities would contain a swan-shot, the smallest a small pin head. The posterior part of the lobe is dull red, tough, crepitant, and infiltrated with bloody serosity.

The *inferior lobe* is pale and crepitant for one-third of its extent, reckoning from the anterior margin ; posterior to that it is dull red, contains but little air, and that only at places. Its surface has a mottled aspect ; the darker and lighter portions at some places being separated by distinct lines, at others passing gradually the one into the other. The paler portions are of a dull yellowish hue, friable, readily break down on pressure, and are non-crepitant, sinking in water. A few points only can be cut from the darker portions, which sink in water ; the remainder, however, contain less air than natural. At the extreme base of the inferior lobe is a considerable portion of the pale tough tissue riddled with cavities, as in the anterior inferior angle of the superior lobe. A small bronchial tube is traceable into one of these cavities, but the majority have no outlet.

Right Lung.—Weight, 11¾ oz. The pulmonary pleura is thickened, and of a dull red colour. Recent lymph unites the superior middle and inferior lobes to each other.

The *superior lobe* is riddled with small cavities, and closely resembles the anterior inferior portion of the left superior lobe. The inferior lobe feels solid ; its section is dusky red, speckled with pale yellowish solid spots, varying in size from a pin head to a quarter of an inch in diameter ; these spots are irregular in shape, and here and there two or more run into each other. The dull yellowish hue of these pale spots varies in intensity. When the red portion between them is examined with a lens, it is found to be finely speckled with minute yellow points—sanded as it were.

Tongue moist, rather brown.

Pharynx and Œsophagus pale and normal in all particulars.

Stomach moderately contracted ; rugose ; the mucous membrane somewhat thickened, pale, and of natural consistence.

Small Intestines.—About fourteen inches above the ileo-cœcal valve, on one of Peyer's patches, is an ulcer three lines in diameter, its floor formed of longitudinal muscular fibres, its edges somewhat elevated, and of a deep grey colour ; that portion of the patch unoccupied by the ulcer is slightly thickened, its mucous membrane retains its normal consistence. Several ulcers resembling the last described, excepting that their floors are formed of transverse muscular fibres, are situated on the patches between the above and the ileo-cœcal valve. The mucous membrane around the ulcers is in every case of a grey colour, and that covering the patches generally softer than natural, and somewhat thickened. The mucous membrane between the patches is dusky red from minute capillary injection ; it is also softer than the mucous membrane a little higher up. The remainder of the small intestines is healthy in colour and consistence. There is no enlargement of the solitary glands.

Large intestines healthy in all particulars.

Mesenteric glands slightly enlarged.

Liver, weight 21 oz. ; healthy.

Gall bladder moderately distended with pale orange-coloured bile ; its lining membrane healthy.

Spleen—Weight 4 oz. ; dark and firm.

Pancreas healthy in appearance.

Kidneys healthy.

The urinary bladder was not examined.

This case illustrates the fact, that typhoid fever may prove fatal to a child. At the outset of this paper I adverted to the frequency with which that disease cuts off the young.

The mode of access of the fever was that very common, *i. e.*, it was gradual ; so that no day could absolutely be fixed as that on which the illness commenced. No source of contagion was traced. Some doubt might have been entertained on the child's admission as to the nature of the disease under which she was labouring. There was general headache, want of sleep, delirium, confined bowels, strabismus, and impediment of speech, but then the history showed the two latter to be natural to the child, and the presence of the rose spots, conjoined with the full and resonant abdomen, and the presence of the bronchitic and pneumonic râles, removed all doubt as to the nature of the primary affection. Still the question remained, had meningitis been set up as a complication? Headache conjoined with delirium rendered it highly probable that there was morbid vascular action going on within the cranium. Still, remembering the extreme infrequency of meningitis as a local complication in fever, and the constancy with which headache occurs, I felt inclined to believe that the vascular cerebral mischief was not very grave in character. The disappearance of the headache shortly after the child's admission, and the absence of any sign of cerebral disease after death, proved the truth of the opinion first formed.

A large pale tongue is not very common in typhoid fever. The characters present in cases 24, 31, 32, and 36, are those ordinarily, but not, as some have maintained, invariably, observed in this affection. But the point to which I desire especially to call attention in this case is the condition of the lungs and pleura. The frequency with which local inflammations occur in typhoid fever is most remarkable. *Pleuritis and pneumonia are both of very common occurrence.* The pneumonia is usually double, set up in numerous points of the organs at the same time, commencing from so many separate centres. In such cases, the blastema effused is capable of evolution only into a fluid, and granular corpuscles,—that first formed is the first to soften. The diffusion of the granular corpuscles in the fluid portion gives rise to the purulent looking matter, (pseudo-pus ;) the still solid blastema to the yellowish friable masses ; the hyperæmia which precedes the effusion of the blastema to the deep red patches. In fact, these little cavities are merely minute disseminated abscesses—the consequence of *l'état purulent* of Tessier—that condition being one frequent in, and subsequent to typhoid and other continued fevers.

I may point out that, in this case the mesenteric glands were less seriously affected than usual, and that the ulceration of the mucous membranes was limited to that covering Peyer's patches. The mucous membrane of the large intestines, the pharynx, œsophagus, stomach, and larynx, having entirely escaped. I have before pointed out the frequency with which the mucous membranes of these viscera are affected in conjunction with that of the small intestine.

THE CHARGE OF PROCURING ABORTION.—Mr. Edwards, who has been accused of operating on a married woman to procure abortion, and against whom an indictment has been preferred accordingly, surrendered on Thursday to take his trial, which was, however, postponed to the next session, on account of the absence of the prosecutrix. The counsel for the prosecution believes she was purposely out of the way.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

INJURIES OF THE BRAIN.

An abstract of the history of two cases of injury of the brain, lately in this hospital, in which the judicious management of Mr. Solly was very apparent, cannot fail to interest the readers of the *Medical Times*. The first is a case of unequivocal fracture of the base of the skull. The man is now apparently quite recovered.

— Horne, aged 38, was brought into hospital the 20th of last month, apparently on the point of death, with symptoms of fracture of the base of the skull. Some time after admission, he became very violent, and it was found necessary to strap him down. With Dr. Conolly, Mr. Solly is against the practice of tying down patients in bed in any form of brain disease, except perhaps this very one,—fracture at the base of the skull requiring as much quietude, as well remarked by him, as fractured fibula or tibia. It is not necessary to describe the symptoms of fracture of base of the skull, nor need we say that, as a general rule, such an injury is fatal; our object at present being more particularly to point to some practical hints as to treatment which werewell marked in the case.

23rd.—He was very noisy; pulse hard; pupils equally dilated. Forty leeches were applied, and mercury given.

26th.—Very restless, and going on for some days not at all well, though leeches have been repeated.

27th.—To-day he is rambling; all his symptoms are aggravated. Mr. Solly has long been under the impression, that, in all such cases, if bleeding does no good, and the symptoms continue, the only resource, as in *delirium tremens*, is opium; forty drops of tincture of opium, with half a drachm of spirits of ammonia, were ordered, to be repeated in smaller quantities at intervals. Next day, the 28th, he was decidedly better: the report is that he has had a quieter night.

30th.—Mouth sore. He sleeps well, and is better in every way.

Oct. 1.—Pupils *unequally* dilated; bowels not open. Ordered castor oil.

2nd.—We need scarcely mention the signs of improvement so familiar to the reader, but he is distinctly better, the opium still acting.

14th.—Walks about the ward apparently as well as ever; it will be judicious to keep him in hospital *very quiet* for some days longer. Mr. Solly lays great stress on his being kept quiet; if this man were a private patient, a man in extensive business, banker's clerk, &c., in a hurry to go to business, probably nothing would save the case from ending in insanity; his advice to all such patients is, that they must live like vegetables—"live like a cabbage"—or they die; they require much watching too; another point he believes very important, they should be allowed to leave their bed as soon as possible,—remaining in bed, he thinks, produces congestion. This hint he long since learned at Hanwell, the insane patients improving much more quickly that are warmly clad and allowed to get up, than those who a few years ago were tied down in bed and kept there; we may add that there has been a case of the same sort lately at Guy's, the man recovering with paralysis of one side of the face, and of the levator palpebræ.

ABSCESS.

A case of this nature, ending fatally, has also been in hospital during the last two months. Thomas Pennington, a robust man, apparently about the middle period of life, received a severe injury from the fall of an iron block on the back of his head, and was admitted into hospital, August 2[illegible], in a semi-comatose state. He has a large scalp wound, and the left parietal bone is extensively fractured. Though half comatose, he tosses his arms about; the pupils are sluggish. At 1 p.m. Mr. Dixon saw him; both tables of the skull are broken into splinters; the inner table to a greater extent than the outer. He removed twelve pieces; one spiculum had wounded the dura mater; there was a considerable amount of hæmorrhage. The patient cried as if he were in great pain; the pulse is 108; the iris freely answers to the stimulus of light; was ordered 2 drops croton oil.

30th.—Has had a rather tolerable night, but is restless to-day; pulse is down to 90; complains of headache. Ordered 40 leeches and hydr. c. cretâ, gr. v.

Sept. 1st.—Quite sensible; improving; repeat leeches; and to have small doses of nitre. Under this treatment the improvement though temporary, was very evident.

4th.—The report is, that he sleeps tolerably well, but complains to-day of headache; answers questions; the bowels, however, are confined; he is anxious to get up, but was not gratified. The pillows were raised as much as possible, according to the hint mentioned in the other case; he appeared relieved by it; spoke quite rationally.

6th.—Going on well, apparently. Mental functions quite clear, though there is a large opening in the skull. At 11 p.m. this night, he was attacked with convulsion, preceded by great restlessness. The abscess which had been forming had broken into the ventricle. The face was drawn to the right side; the pulse rose to 130; after the fit the poor fellow asked eagerly what had happened. There was loss of motion and sensation in the limbs; it was evident extensive disorganisation had taken place at the centre of the nervous system.

9th.—Paralysis increasing; sensation not so much engaged. He appears drowsy; he is completely hemiplegiac on the right side.

11th and 12th.—No marked improvement; the symptoms all of the most unpromising kind.

14th.—Weaker every day; *right* pupil dilated more than the left. He was ordered a seton. Speech gone; other symptoms worse.

25th.—Since last, speech improving; but the case otherwise hopeless.

29th.—Was found this morning half out of bed, in a state of coma, and soon after died.

After Death.—The external injury was found to be confined to the left side of the skull; the posterior part of the parietal bone presenting a large opening, the size, perhaps, of a sixpence. There was no fissure in the bone; the dura mater was ulcerated, and there was considerable *hernia cerebri*. The arachnoid round the wound was attached to the brain. On removing the latter, the base about the *sella turcica* was smeared with thick yellowish pus. Mr. Solly next made a horizontal section of the left lobe *in situ*, carrying the knife through the roof of the ventricle; before doing so, on pressing the brain externally, the finger felt a depression or cavity, evidently that of the empty abscess. All the posterior cornu of the ventricle was filled with pus; the roof of the ventricle was ulcerated and communicated with the external wound. The other parts of the body were healthy; the heart quite sound, as also the organs in the abdomen.

Cases of this kind at first appear to do well, and then suddenly become worse. On a superficial view, one might have been led to hope for a more favourable termination; the inflammation of the dura mater and brain, and injury of the former, however, go on almost always to abscess. The convulsions occurs at the instant of the bursting of the abscess into the ventricle—whether as cause or effect may be a matter of speculation—that it occurs at the moment, there can be little doubt, as, up to the time of the convulsion, we find the discharge from the wound *purulent*, after that *serous*, quite clearly from the cavity of the ventricle. The absence of mental disturbance till near the end of the case we should ascribe to the very limited or circumscribed character of the inflammation.

ROYAL FREE HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S.L.

AMPUTATION OF THE LEG.

The patient is a spare young man, whose sufferings seem rather attributable to the weakness and irritability of his system than to any fault in his habits.

He is a sawyer by trade, and had gone to Camden-town to seek for work on the railway; and, while looking about there, he very imprudently stood on the rails; a large steam-engine which draws the wagons along by an endless rope, and which was in full play, prevented him, by the noise it made, from hearing a train which was coming up, and which just caught his eye in time to enable him to spring

back and push himself off by his hand from the foremost wagon. But, though he thus saved himself from being run over, the end of his boot was caught by the first wheel, and ten wagons, loaded with rubbish, passed over his right foot.

This happened on the afternoon of the 1st of August, and he was brought the same evening to the hospital. It was then found that the great toe was shattered near the meta-tarso-phalangeal articulation; the muscles and skin were torn away from the phalanges, and blood was issuing freely from the wound; the next toe was injured almost as severely. Mr. Robertson, the house-surgeon, removed the toes, closed the wound with stitches, and applied water-dressings. Some hæmorrhage, however, went on during the night. His health not being in a very good state, and there being some feverishness and irritation from the accident, he was put upon saline mixture, with tincture of hyoscyamus, and the hydrarg. c. creta was also given; cold-water dressings were freely employed, and low diet enforced. On the 3rd the inflammation began to manifest a more dangerous character; and, as it did not appear likely to yield to this treatment, more rigorous antiphlogistic measures were put in force; but next morning, on removing the dressings, the nurse found the dorsum of the foot covered over with livid vesications and black spots; and inflamed streaks appeared running up the leg, the lower part of which became covered with an angry flush, the pulse sank, and the man appeared much prostrated. Inflammation of a low, unhealthy kind had set in about the dorsum of the foot and ankle, the red blush crept higher up the leg, and the third and fourth toes sloughed off. Stimulants were then given, and the sloughing surface dressed with yeast-poultices. The collapse which was coming on was thus warded off, and the man's life was saved; but, as mortification was still impending in a very serious form, Mr. Wakley deemed it best to amputate, which was done on the 7th of August, just below the knee, ʒj. of the solution of acetate of morphia being given soon after the operation.

But, for some time after the operation, he remained in great danger. Sloughing appeared on the stump, and sinuses formed along the tibia, while the patient appeared gradually sinking. He was then put on ʒviii. of wine daily, with a pint and a-half of porter. He had an egg for breakfast, plenty of meat for dinner, and beef-tea for supper. Under this active treatment he soon rallied, and the stump took on a healthier action. He is now able to walk about on crutches.

There seems little in the man's history to account for the violence of the symptoms. He has never been seriously ill, so far at least as he can recollect. Last year he had a fever, which, however, does not appear to have in any way impaired his health. He has been a teetotaller for a long time, and has not been exposed to want or the inclemency of the weather, at least in any great degree, nor is he aware of anything likely to have seriously injured his health as to have given him a tendency to this form of disease.

STRICTURE — SECOND OPERATION — DEATH— POST-MORTEM EXAMINATION.

Even if no others had ever been recorded, the following case would be in itself sufficient to refute Mr. Syme's opinion, that there is no case of stricture so impermeable that he could not pass an instrument through it; for it must be evident, that, when a stricture has been laid freely open from before backwards almost to the bladder, and when it is then found impossible to get any instrument into the latter viscus, it would be impossible to do so from the mouth of the urethra, and, if a stronger term than impossible existed in our language, we might employ it for the latter act. However, notwithstanding what Mr. Syme says, we believe it is pretty generally admitted that strictures are constantly met with through which no surgeon, however experienced, can pass an instrument, even though the water comes off regularly by this channel. The following case, we think, will tend to exemplify this, and therefore we shall give all the information we have been able to collect concerning it:—

The patient, a man turned of forty, had lived very freely, and, like many of his class, had suffered from neglected gonorrhœa—one result of this was a stricture, which began more than twenty years ago. He never would attend to it regularly till it was cured, and at the end of seventeen years came under Mr. Liston's care for retention of urine. Fourteen years ago he was under Mr. White in the Westminster Hospital for stricture, also once before under Mr. Liston, and it was his second visit to the Royal Free Hospital. On his second visit to Mr. Liston, this surgeon cut into the perinæum; but, according to the man's statement, could not get any instrument into the bladder; repeated efforts were made, but without success, and the urine continued to dribble way in a small stream. Subsequent to his recovery from the operation, an abscess formed in the perinæum, followed by a fistulous passage, at an inch and a half from the anus. His urine passed partly through the opening left by the bursting of this abscess, and partly by the natural canal; but it gradually ceased to flow by the latter passage, and came away entirely through the fistulous opening. Under these circumstances he applied at the hospital, and was made an in-patient in July last.

At this time his health was in a very depressed state; his hand shook, and he bore the appearance of an habitual debauché. His bladder was extremely irritable, but the urine was healthy. From the fistulous opening the tissues surrounding the urethra could be felt to be enormously indurated and thickened. On attempting to pass a small instrument into the bladder, it was found that, on reaching the membranous portion of the urethra, no force could push it further forwards through the stricture, for it instantly became engaged in a sinuous and unnatural channel, which passed along for some distance. In this state of matters, Mr. Gay resolved to operate on him as soon as possible, and on the 1st of August the man was brought in, and the operation begun with.

Having passed into the urethra a sound grooved at the sides, so as to present in the perinæum, Mr. Gay made an incision down upon it, and with some difficulty divided the anterior portion of the hard gristly stricture; posterior to this lay a mass of cartilaginous hardness around the urethra, with one or more false passages. So much of the operation being accomplished, Mr. Gay attempted to pass an instrument into the bladder; but, though he had made a full, free opening in the front part of the urethra, and he now, by the aid of a catheter, easily recognisable in the wound, was enabled to follow up the urethra for some distance, slitting it up as he advanced, till he came at last so near the bladder that he could easily have pushed a trocar into it, yet he could get no instrument into it by the natural channel, as this could not be traced; so that the operation had to be suspended at this stage, as it had lasted a considerable time, and it was feared that further exposure to the influence of chloroform, of which the patient had now inhaled a very considerable quantity, might, in a man of his shattered constitution, produce very serious effects. Besides, it was hoped, that, after the excitement had subsided, and the bleeding had been completely checked, an instrument might be passed through the whole of the urethra into the bladder; and this hope was realised, for the next morning Mr. Robertson was able to introduce a small catheter, the orifice of the urethra being with some difficulty made out.

For some days the case presented a fair prospect of success; the urethra was undergoing gradual dilatation, the most urgent symptoms were passing off, and he made water freely. But all at once, about the fifth day, without any appreciable cause, he began to sink; the pulse flagged, and with it all the phenomena of life. Active stimulation was resorted to, but without any good effect; he gradually sank, and died in about ten days after the operation.

On making a *post-mortem* examination but little was found that could in any way account for death. The urethra up to the bladder, which was healthy, was surrounded, as we have stated, with a hard cartilaginous mass with false passages. There were no signs of infiltration of urine, nor extensive mischief of any kind resulting from the operation on the stricture. But it must not be forgotten:—

1. That the man's health had been very seriously impaire by a long course of debauchery and protracted suffering.

2. That in many instances no disease has been found on *post-mortem* examination to account for death. This has been fiercely denied, and ascribed to over-hasty examination, particularly by those who regard the human frame as a machine, in which it is absolutely necessary, for the cessation of their separate functions, that in the one a cap, a crank, or a wheel, must wear out or break, and, in the other, a heart, lung, or liver must be disorganised. They might easily have convinced themselves, by giving strong prussic

acid to a dog, that this is not the case. To us it certainly appears, that the animal always dies by translation of the vital power from the parts necessary for life to the part attacked by the hostile agent; that a mechanical and physical impediment to the performance of life is rather an accidental concomitant than an absolute necessity, and that in cases where portions of the frame have been long acted on by disease, the vital power is less fixed in the parts necessary for the maintenance of life, and hence more easily drawn to the part where any injury, such as the wound for lithotomy or stricture, is inflicted; thus bringing the individual into the state of the child, in whom it is necessary, for the purposes of growth, that the vital power should have less fixity, and in whom a slight accident destroys life.

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LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, November 2.—Guy's Hospital Physical Society. Eight o'Clock.

——— ——— Medical Society of London. *Subject*:—Consideration of the Laws of the Society. If time permits, a Paper to be read by Dr. Webster, F.R.S., on the Sanitary Condition of London for the last Six Months, ending September 30, 1850. Eight o'Clock.

Tuesday, November 5.—Pathological Society of London. Eight o'Clock.

——— ——— Linnæan Society of London. Eight o'Clock.

Thursday, November 7.—Harveian Society. Eight o'Clock.

Friday, November 8.—Botanical Society of London. Eight o'Clock.

Saturday, November 9.—Medical Society of London. *Subject*:—Mr. J. B. Brown on the Treatment of Ovarian Dropsy by Lateral Opening. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 2.

HAHNEMANN AND HIS DISCIPLES.

Whatever may have been his mental defects, and they were many and great, there is no doubt that Hahnemann was an enthusiast, not a knave. He was a dupe unto himself. He caught up an idea from some vague analogies, and spent his life in endeavouring to give to it coherence and consistence. He had no mistrust of his own dogma; he made no qualifications; his only thought was to utter this dogma in terms so strict and rigid that no man could mistake their import and extent. His followers now lie under the disadvantage of being unable in any way to modify or soften the expressions of their inexorable chief.

From the time when Hahnemann first enunciated his dogma, that the rule for administering medicines was included in the expression that "like cures like,"—from the moment when he wished to supersede the old therapeutic rules, which were based on the daily experience of ages, till now, when his dogma has been echoed and re-echoed, parrot-like, by too-credulous zealots, and by interested partizans, there has been one constant answer to his assertion. *Where are the proofs? Where are the examples that "like cures like?" On what facts is this dogma based?* There is nothing in the dogma which is at first sight so obviously inconsistent with well known and assured facts, as to warrant its immediate rejection. When first propounded, it might seem to many that it was worthy of being tried by the common rules of evidence. But when it was found that the enunciator of the dogma brought forward no sufficient evidence in its favour,—when his few crude experiments were instantly refuted,—when the real strength of his argument was proved to rest, not on numerous and repeated observations of the truth of his aphorism, but on the acknowledged and, we may add, necessary imperfections of the healing art; when it was noted that he could not reply to the obvious objections which were brought against his creed, then the hypothesis of Hahnemann fell into deserved and merited contempt, and his name was justly placed on that numerous muster-roll of enthusiasts who set up the material image of their own vain and limited imaginations, in the place of the awful and spiritual truth. When, during the last twenty years, some too-sensitive and feeble mind, disconcerted with the vicissitudes and doubts which beset the practice of the most difficult of arts, has taken refuge from the *necessary* uncertainties of medicine(a) in the confident and unhesitating assertion which a stronger will than his own has framed. Then, again, men have curiously asked for the reasons of this conversion, and have prayed the renegade from their ranks to narrate to them the reasons for his change of creed.

It was in this spirit, and with no uncharitable motive, or desire to bring Mr. Wilson forth from the comparative quiet of private life into the glare and sunshine of the public press, that we begged, on a late occasion, a gentleman who at one time held an honourable post in our profession, to explain to us on what grounds he had adopted, as the basis of his therapeutics, a hypothesis which the wisest of the profession had considered and condemned. We proposed to Mr. Wilson a simple question,—What arguments, what experiments, what facts have led him to believe that the homœopathic dogma, that "like cures like," is true?

To this question, we regret to say, Mr. Wilson has returned no satisfactory answer. We ask him what special examples convinced *him;* and in return, he refers us to the Organon of Hahnemann, and offers to answer any objections *we* may make to Hahnemann's arguments. This is as if the priest should refuse to expound his creed, but should wait till men learned it for themselves, and then came before him with their objections to it. It is an ingenious way of throwing the *onus probandi* on the shoulders of the disputant, who happens to have nothing to prove, but is waiting to hear. However, since Mr. Wilson thus selects a field of battle to which, in reality, he has no right, we will indulge him, and will, on a future occasion, lay bare the sandy foundations of that building, which the advancing tide of truth has already shaken, and will speedily engulf. We will undertake to prove that Hahnemann did not understand the true foundations of medicine, that he did not comprehend the science of his own time, that he selected all the inevitable failures of

(a) For no sensible medical man believes that his art is perfect, or that he can, like a God, work infallible cures. Such certainty is not given to our limited faculties, and probably never will be. What we claim is, that we do all in sickness that human aid can do. In some cases it is more, in some it is less; but whatever assistance can be given by man to man, is given by us, and, as we firmly believe, can be given only by us, who cultivate medical science, as all other sciences are cultivated, according to the rules laid down by Bacon, by observation and experience.

human knowledge, and with them battered, like a parricide, at the noble form of Truth; and that when he had, as in Milton's grand simile, scattered the limbs of Knowledge to the four quarters of the globe, he reared up in their place a fantastic image, with a face of brass and feet of clay. But we leave for a while Hahnemann and his hypothesis, and return to Mr. Wilson and his conversion.

The causes which directed Mr. Wilson towards homœopathy appear to have been two. First, he has met in the course of his practice with obstinate chronic diseases, the sufferers from which, after being vainly treated with the ordinary therapeutic plans, have had recourse to homœopathy. Some of these patients have subsequently presented themselves to Mr. Wilson freed from their complaint. Mr. Wilson thereupon attributes the whole cure to homœopathy, and is inspired with a distrust of his own practice. The utter want of logic in this argument need hardly be pointed out. Mr. Wilson does not tell us how many cases out of his whole practice were of this kind; we are not informed whether the greater number of the cases, or their special character, prove that there must have been a connexion between the employment of homœopathy and the recovery to health. Every one accustomed to scientific reasoning knows well what precautions are necessary in investigating alleged causal relations between events, when there are numerous coincident circumstances, any one of which may in reality be the cause instead of the presumed agency. Mr. Wilson's cases are familiar to every practitioner. These are the cases in which, a certain amount of mischief having been done to the texture of some organ, time is necessary before the lesion is repaired; before exudation can be absorbed, deranged mechanism repaired by compensating changes, or impeded excretion removed by increased activity of corresponding uninjured parts. In these cases, men like Mr. Wilson bring to bear a whole array of drugs. With no accurate diagnosis, with no knowledge of the inevitable course of the disease they treat, with no real conception of the nature of their therapeutic means, they torture their patient with their most potent agents. At length, the patient, wearied by the treatment, deserts them. If, however, the treatment has not been very injudicious, the disease has been in reality slowly disappearing. Nature is never inactive, but, with incessant changes, tends to repair the weakened points of her wonderful machine. The homœopathist, receiving the case at its termination, reaps the credit of the cure. In the same way, almost daily, one practitioner falls into discredit, another acquires fame, from the mere accident that one has treated the commencement, the other the termination, of a disease in which time is a necessary element of cure. Nay, the homœopathist now finds the argument turning against himself, and numerous patients who resort to him at the commencement of a disease of this sort, subsequently abandon him, and recover under the usual care of regular practitioners.

Now, to say that there "is something wrong in the state of Denmark," because drugs cannot at once set right a lesion of this description, appears to us to betray a want of professional knowledge. Can drugs, by a fortnight's medication, make half a kidney, or at once reconstruct the delicate capillaries of a lung, or heal by magic an ulcerated stomach? The error of the practitioner consists in a want of diagnosis; and the so-called uncertainty of medicine is more than half attributable to his untutored ignorance. Medicine can do much, but it is not omnipotent to do all things.

Let us pass, however, to Mr. Wilson's next clause. After a time he fell ill himself, and remaining ill for some time, at last recovered under the use of simple hygienic means. *This "shook his faith in physic!"* Why, it *was* physic. These simple hygienic means *were* physic in the best sense of the word; and the singular confusion which exists in Mr. Wilson's mind, between drugs and the art of healing, can only be explained on the supposition that he has never considered the subjects of diet, of exercise, of calling into active play the several emunctories of the system, as falling within the domain of medical practice. However, Mr. Wilson then became a "thorough liberal" in medical science; that is, his old erroneous notions having been sapped, he drifted about with no fixed notions of any kind, and became a ready prey to the first confident pretender he met, who promised to give him again something like a fixed principle of action. But, even here, Mr. Wilson will perceive that his recovery under hygienic means, although it may prove that drugs in his case were unnecessary, has nothing whatever to do with Hahnemann's dogma, that "like cures like."

Such are the reasons given by Mr. Wilson himself, for his conversion to homœopathy. We cannot congratulate him on the prospect of his making many proselytes.

We would gladly pass over what we have to say regarding Mr. Wilson's illustrations of the effect of triturating substances, and of dividing doses, because we are really unwilling to be censorious on an observer who is evidently sincere and honest. But as great principles are at stake, we must not hesitate to declare, that not only is Mr. Wilson a very bad logician, but that he betrays an ignorance of some simple matters which really surprises us. Mr. Wilson administers fluid mercury and finds it inert; he rubs it in a mortar, and finds it becomes possessed of poisonous properties. *Ergo*, the trituration increased the power. This is quite true; but how does it do this? Why, every tyro knows that the trituration produces minute subdivision and favours oxidation; that the mercury, before trituration, and after it, is in entirely different conditions; that whereas common fluid mercury can hardly be acted on by the fluids in the alimentary canal, and can much less pass into the capillaries, the finely divided particles of metallic mercury, and the oxide which is also formed, are, on the contrary, readily soluble in weak acids; and such solutions are at once absorbed into the circulation. Mr. Wilson's next illustration is still more surprising. The different effects of oxalic acid, taken in large quantity and in the solid form, (when it acts corrosively on the stomach, and passes with great slowness into the circulation, but kills chiefly by its local action,) and taken in smaller quantities, with an amount of fluid in the stomach sufficient to prevent its strong corrosive action, and to ensure its transit into the circulation, (when it kills more speedily by its specific effects on remoter parts of the system,) are so well known to every one, that we can only conceive Mr. Wilson must have momentarily forgotten them, when he cited them as instances favouring the notion, that lessening the dose of a medicine can increase its force. It may give the force another direction, but it cannot augment the same kind of action which a larger dose of the medicine gives.

But we must conclude for the present, although we shall soon return to this subject of homœopathy, the dogmas of which, although unworthy of the present state of medical science, have unfortunately found a reception among some of our profession, whose minds are peculiarly susceptible of the arrogant assumptions of an undoubting enthusiast, who have not clearly understood the grounds on which the art of curing or alleviating diseases is based. A very important

case has lately occurred at Honiton, in Devon. Mr. Holland, the Union surgeon, has been reprimanded by the Poor-law Commissioners for insisting on treating his cases homœopathically. This is a very just decision. Let the rich man go to whom he pleases, but the poor man can choose only one doctor, who should not be allowed at his own discretion to disregard the decision of the wisest and most learned of those who have studied this reputed therapeutic law of Hahnemann, and have found it unsupported by the shadow of a proof. We are not desirous of persecuting those who differ from ourselves in opinion; but it is the duty of every man, when an assertion is made which affects the whole art of curing diseases, to examine it for himself, and if he finds, as in the case of the homœopathic dogma, "like cures like," that the assertion is a vain imagination, and is unworthy of scientific consideration; then we say, every man is bound to express, openly and manfully, in the face of day, his conviction of the falsehood of the pretended truth. When Dr. Williams refused to meet a homœopathic practitioner, he made this avowal, and the common sense of every man will justify his act.

SALINE TREATMENT OF CHOLERA.

We have to call the attention of our readers to an advertisement in our Journal of this day, relative to the saline treatment of cholera; wherein Dr. Bushnan requests those gentlemen who have experienced its effects, especially in the recent outbreak, to favour him with the results of their practice and observation. It is very important that this vexed and much agitated question should be definitively settled; and, we doubt not, the profession will readily aid Dr. Bushnan in arriving at a positive and undeniable conclusion as to the merits or demerits of Dr. Stevens's plan.

In reporting cases, it will be very necessary to state whether the saline treatment was practised in its entire integrity, or combined with other medicinal means.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

TREATMENT OF TYPHOID FEVER.

I forward to you annexed an important paper "On the Treatment of Typhoid Fever," presented to the Institut last week by young Becquerel. Although experience teaches us not to place too much confidence in any announcement relative to the value of specific treatment in dangerous maladies, it is impossible to read M. Becquerel's memoir without being convinced that the method proposed by M. Serres is worthy of the deepest attention. No one in England is better able to test this matter than Dr. Jenner; and I earnestly hope that his rigid judgment may be exercised on it after mature trial.

The mercurial doctrine is not a new one. All those who, in bygone times, attended the pathological lectures of the late Professor Macartney, at the University of Dublin, must remember how that celebrated man insisted on the fact of mercury being the most efficacious remedy for typhus fever. He used to dwell particularly on the circumstance, that the fever almost always gave way as soon as salivation could be established. The pupils, however, and the medical public gave little heed to what they regarded as mere theory—the idea of one who had no practical experience to support his conceptions. Since the publication of M. Becquerel's memoir, ten additional patients, labouring under severe typhoid fever, have been cured by the mercurial method. This gives a sum of twenty-five cases, with *one* death,—a result which certainly entitles the practice to consideration, if it does not at once stamp its merit.

The combination of sulphur with mercury appears to have some influence on the tendency of the metal to excite salivation. I cannot, at the moment, remember whether this remark has been made before, but I do remember that the surgeons of the Toulon Hospital employ a strong mercurial ointment, combined with sulphur and some lime, the use of which, they say, does not produce salivation, although its specific properties are in no way impaired by the mixture.

In the year 1847, M. Serres read at the Institut a series of papers on "The Nature and Treatment of Typhoid Fever," and proposed a new mode of treatment, which he considered likely to exercise a most beneficial influence on the progress and character of that disease. The mercurial treatment of M. Serres consisted in the internal use of the black sulphuret, in doses varying from twelve to sixty grains, and in frictions over the abdomen with common mercurial ointment, in quantities varying from half an ounce to one ounce daily.

This treatment was continued for ten or twelve days—even longer, until the prominent symptoms of the fever had given way.

Having been appointed to take charge of M. Serres' patients at la Pitié for some time, M. Becquerel resolved on submitting the mercurial method to further experiment. He therefore made trial of it on fifteen patients affected with typhoid fever, abstaining, with some slight exceptions, from the use of any other remedy.

The black sulphuret of mercury was administered to each patient immediately on his admission; he began with thirty-two grains, in the form of pill or powder, divided into five or six doses. If no improvement took place in two or three days, the dose was increased to forty-eight or even sixty-two grains. As soon as convalescence commenced, the remedy was discontinued. In no case was the salivation severe enough to render discontinuance of the mercury necessary.

The mercurial ointment was employed in the quantities recommended by M. Serres, being increased in such cases as demanded an increase of the sulphuret. Thus, with thirty-two grains of the sulphuret, sixteen scruples of mercurial ointment were employed in two frictions; and with sixty-four grains, thirty scruples. In order to favour absorption, the abdomen was cleansed every day with soap.

The accessory remedies employed were—ice, seltzer-water, and lemonade, as a drink; simple lavements, or, in cases of constipation, a laxative clyster.

In ataxic cases, of which four occurred, musk was administered as a stimulant to the extent of five or six grains a day.

The following are the results of the practice:—Fifteen patients, all labouring under typhoid fever in a severe form, were treated—ten men, five women. The men were aged—2, 16 years; 2, 17; 2, 18; 1, 20; 2, 22; 1, 36 years. The ages of the women were—15, 18, 20, and two of 21 years.

The male cases may be arranged as follow: 4 labouring under the ordinary abdominal form; 5 presenting adynamic symptoms of a very severe nature; and 1 with ataxic fever, in which the delirium and agitation predominated.

Of the females, 1 was affected with the adynamic form; 1 with common typhoid fever; 1 with the ataxo-adynamic, and 2 with ataxic fever. Dating the commencement of the attack from the first appearance of a febrile movement, we find that 2 entered hospital on the second day; 2 on the fourth; 7 on the fifth; 3 on the sixth; and 1 on the eighth day. The premonitory symptoms of headache, muscular depression, &c., had, besides, varied from three to twelve days before the regular febrile attack commenced.

The treatment was begun, in the 15 cases, on the day after admission. The following were its principal effects:—

Febrile Movement.—The first few doses of the sulphuret, and a few frictions, diminished the heat and dryness of the skin, which in some cases became moist. The pulse, at the same time, constantly fell. It varied from 84 to 116 in the different cases, and in all the frequency was diminished by the third day.

Mouth.—The dry, rough condition of the tongue, and the blackness of the lips, never disappeared until salivation had set in. This latter occurred twelve times in the 15 cases: it was absent twice; and in these two cases, recovery was just as prompt as in the former. In the only fatal case, the tongue remained dry to the end of the disease. In every case but one, the salivation was slight: in the one excepted, the tongue and gums continued swollen for twelve days.

With respect to this effect, the following propositions appear to be established:—

1. In ordinary typhoid fever of moderate intensity, salivation occurs more quickly than in the other forms; it is more decided, and continues a little longer during the convalescence, of which it is usually the precursor.

2. In severer cases, the salivation occurs at a later period, and is less considerable; sometimes it takes place at the moment the febrile symptoms disappear; in other cases, a few days previously.

3. In the most dangerous cases, it is very difficult to excite salivation, and, until this takes place, we have always to dread some accident. Great perseverance is therefore requisite.

4. Finally, in a few mild cases, salivation does not exist, the mercury appearing to master the disease in less doses than are necessary to stimulate the salivary glands.

Tympanitis.—In every case, except the fatal one, this symptom diminished with great rapidity, and that from the commencement of the treatment.

Bowels.—The mercury produced, in two cases, one or two fluid stools daily; in two others, accompanied by constipation, it had no laxative effect, and lavements became necessary. In three cases of diarrhœa (five or six fluid stools a day) the looseness diminished in a remarkable manner as soon as the remedy was employed. In eight cases it had no effect whatever on the state of the bowels, neither augmenting nor diminishing the diarrhœa.

Rose Spots.—These spots, when situate on the abdomen, were invariably removed in twenty-four to thirty-six hours by the mercurial frictions; but they continued their course on the other parts to which mercury was not applied.

Delirium.—When this symptom was at all prominent (four cases) musk was given to the extent of five or six grains daily. Although so violent that the use of the straight-jacket had been necessary, these patients became calm in four or five days. As to the cough, chest symptoms, and stupor, they followed the general course of the disease, and appear to have been modified in a secondary way only.

Duration of Treatment.—In four cases the treatment was prolonged to 7 days; in three cases, to 8 days; in one to 9 days; in three to 10 days; in one, to 12; in one, to 15; in one, to 16; in one to 17 days. The mean duration was, therefore, 10 days.

The quantity of mercury employed was, on an average, 12½ scruples of the sulphuret, and 200 scruples of mercurial ointment. The smallest quantity was, 7 scruples of the sulphuret, with 112 scruples of ointment; the maximum, 24 scruples of the former and 360 of the latter.

Duration of the Disease.—The mean duration of the disease in fifteen cases was 16 days. In one case the duration of the fever was 12 days; in two, 13 days; in three, 14; in three, 15; in one, 16; in one, 18; in two, 20 days; in one, 21 days; and, in one, 23.

From the above facts M. Becquerel draws the following conclusions:—

The treatment of typhoid fever by the black sulphuret of mercury and mercurial frictions over the abdomen, is attended by the most advantageous results. The effects are the more striking in proportion as the disease is treated at an early period. In fifteen cases, all of a severe nature, taken indiscriminately, only one death occurred, and that from perforation of the intestine. The duration of the disease, also, was unquestionably shortened by this method of treatment, for it varied from twelve to twenty-three days. The duration of the treatment varied from seven to seventeen days.

The following were the most remarkable effects of the remedy:—Diminution of the force and frequency of the pulse, and of the heat of skin; *rapid and early disappearance of the typhoid eruption;* rapid removal, also, of the tympanitis; excitement in a great majority of the cases of salivation on the 6th to the 13th day, which is almost a certain sign that the treatment has succeeded, and that the patient will recover. Combined with mercury, the musk was effectual in subduing rapidly the most severe ataxo-adynamic symptoms.

ITALY.

THE HOSPITALS OF ROME.

The Roman hospitals, properly so called, may be distinguished into two classes, viz., those established by the Pontifical Government, and those founded by various Catholic powers for the exclusive reception of their several subjects. The latter were at one time extremely numerous; but, since the decadence of Rome, are now reduced to nine.

The hospitals of Rome are nineteen in number, viz.:—

	Beds.
San Spirito	1616
San Salvatore	576
Santa Maria	500
Santa Maria de' Poveri Pazzi	420
San Giacomo	384
San Gallicano	238
Santa Maria della Consolazione	157
Ben Fratelli	74
The Convalescents	480
Nine Foreign Hospitals	50
San Rocco	26
	4521

San Spirito, the largest of the Roman hospitals, was founded in the eighth century by a Saxon king, named Sena, who had retired to the Eternal City after having abdicated his crown. It is exclusively destined to patients labouring under fever, and extends in a long line along the right bank of the Tiber, not far from St. Peter's. This immense establishment is comparatively deserted during the healthy season; but each year, as the endemic fevers become developed, the country people crowd in, and more than 1000 find accommodation within its walls.

San Spirito is the clinical hospital of the Roman capital; hence a certain number of beds are set apart for clinical patients. They are, however, very few in number; the male ward containing only twelve, and the female six beds. Still, as the professors have the right of selection from all the other hospitals, the cases are usually of an instructive and interesting nature. The hospital likewise possesses an immense lecture-room, a small cabinet of natural history, a good dissecting-room, a museum of morbid anatomy, and, above all, the splendid library bequeathed to it by Lancisi.

The hospital of San Spirito, though capable of containing 1600 beds, has only twelve wards. Many of the latter, therefore, are vast beyond all proportions. The largest, which contains in its centre a regular chapel, is 400 feet long by 36 broad, and accommodates no less than 400 fever patients. As the windows are not well disposed, and, moreover, seldom opened, this ward—in itself a hospital—is foul, dirty, and unwholesome. The other wards contain from 280 to 360 patients each. The number of medical officers attached to San Spirito is twelve—four principal and four assistant physicians, two principal and two assistant surgeons—to say nothing of the honorary staff. From the years 1831 to 1840, 134,916 patients were admitted into the hospital; of whom 11,455 died, or 8·27 per cent.—a mortality fully equal to that of our own fevers.

Female patients, when attacked by fever, are received into the hospital San Salvatore, founded in 1216 by a member of the celebrated family Colonna. It contains 576 beds, and is much better regulated than the San Spirito, the wards being attended by the Sisters of Pity. The number of patients admitted during the decennial period, 1831—1840, was 30,546; of whom 4541 died,—a mortality of 14·86 per cent. This great difference between the results of fever as attacking females and males, may partly depend on the unwholesome site of the hospital, but it seems chiefly determined by the miserable condition of its unhappy patients. In the lower ranks of life, and in a poor country, females always suffer more than males.

San Giacomo likewise owes its foundation to the Colonna family. It is situate in the Corso, the principal street of Rome, and contains 384 beds, for females labouring under accidents or the venereal disease. The "new ward" of San Giacomo is perhaps one of the finest in Europe, and presents a strong contrast to the negligence which prevails in the other establishments of the holy city. From 1831 to 1840, 20,682 patients—of whom 2337 died—were admitted into the hospital. The mortality, therefore, was 11·29 per cent.

Santa Maria della Consolazione may be considered as the hospital of emergencies. It contains 157 beds, and is destined for persons of both sexes suffering from accidents which require prompt surgical aid. The mortality for the males is 4·69 per cent.; for the females, 7·54 per cent.

San Gallicano, with 238 beds, forms an hospital set aside for diseases of the skin. During a period of ten years, 5,461 patients were admitted, of whom 262 died, or 4·79 per cent.

The midwifery hospital, San Rocco, is very small, containing from 20 to 26 beds only. All women, whether married or not, are admitted if the case be urgent; but they are not allowed to remain, on an average, more than five days. The children are deposited in the Asylum of the Pia Casa. If any faith is to be placed in official returns, the practice of this hospital ought to be a model for all Europe, inasmuch as only 8 deaths occurred in 1658 cases admitted during the ten years we have taken for our statistics. A mortality of 0·47 per cent. is a result which surpasses anything that we have been accustomed to from the records of other obstetric hospitals. The causes it is impossible to discover, for the hospital doors are closed against the profession as well as the public. How the art can have arrived at the perfection inferrible from the mortality just alluded to, is the greater mystery, because the Roman accoucheurs are the worst-instructed in Europe. Until he has taken out his degree, no student knows anything of obstetric practice beyond what he can learn on the mannequin.

Santa Maria de Pazzi, the insane hospital of Rome, contains 420 beds. The poor are paid for by their respective parishes, and those above the class of paupers are received for a small annual sum. The treatment, especially the moral portion, is extremely deficient. The cures for ten years are as follow:—Males, 63·52 per cent.;

females, 46·02 per cent. The deaths, 33 per cent. for males; nearly 56 per cent. for females.

Having thus briefly noticed some of the principal Roman hospitals, I shall conclude with a few general remarks on these establishments.

The stranger, especially one arriving from France, is immediately struck by the fact, that the interior service of the hospitals is not performed by sisters of charity. Yet Rome is overrun with females devoted to a religious life. The fact is, the Roman women appear to embrace religious orders through sheer laziness for the most part, and hence their lack of zeal. To stimulate them, if possible, Pius the Ninth has recently imported from France five sisters of charity, and attached them to the Military Hospital of the Knights of Jerusalem. The example, it is to be feared, will produce little effect.

The Roman hospitals, generally speaking, are not situate in the best parts of the city; and their internal arrangements are far from being perfect. The wards, as has been mentioned, are incommodiously large, and the beds arranged in several lines, without the least lateral space between them.

Each hospital, moreover, had its own cemetery. This was nothing more than an immense cellar excavated under one of the court-yards, into which the dead were cast pell-mell, with a want of decency worthy of Enon-court or the green ground. A recent order, obtained in all probability by French influence, has put an end to this disgusting and dangerous practice.

The medical staff of the Roman hospitals is recruited nearly on the same plan as that prevailing in Paris, with this difference, however, that the medical men are paid for their services.

The physicians are distinguished into principal and assistant; both are elected by *concours*. The "principal" are elected for life from amongst the "assistants." When elected, they entitle themselves "professors," and receive an annual salary which, at San Spirito, amounts to 228 crowns.

The assistant-physicians receive about 100 crowns a-year, but are lodged and fed at the expense of the hospital. The same rules apply to the surgical staff. In the Roman States, however, as it was during the middle ages, surgery is completely separated from medicine, and the surgeon has no right to prescribe the most simple *internal* remedy. This obsolete distinction leads to great confusion in the treatment of the patients.

The "dressers" in the Roman hospitals occupy the same rank and perform the same duties as the *internes* and *externes* of the Parisian hospitals. The *internes* are called "caporali," receive fourteen crowns a-year, and are supported in the hospital. The *externes* also enjoy some slight advantages, amongst them that of wearing a peculiar dress, which, at San Giacomo, is a scarlet cassock.

The great sore of the Roman hospitals, however, is the crowd of functionaries and *employés*—official harpies, who devour everything they can lay hands on, and whom the efforts of succeeding governments have been unable to correct or expel. These worthies pursue a system of open plunder in the most barefaced manner, appropriating to their own use not only the funds, but the furniture, the medicines, and even the very food, of the unfortunate patients. Pius the Ninth has frequently attempted to reform them, but in vain.

SCOTLAND.

PROFESSOR GREGORY'S PROCESS FOR PREPARING AND PURIFYING CHLOROFORM.

It was announced from Edinburgh, some months since, in the *Medical Times*, that Dr. Gregory, our Professor of Chemistry, had devised a mode of procuring a perfectly pure chloroform by means of sulphuric acid; and the professor afterwards published his paper in the May number of the *Monthly Journal of Medical Science*. It appears, however, that some difficulties have arisen in the practical application of Dr. Gregory's directions. It has been found, both in Edinburgh and elsewhere, that chloroform, believed to have been prepared in accordance with the professor's method, has, after a time, become loaded with chlorine. The Edinburgh manufacturers have been obliged to recal the chloroform prepared on this plan, which had been sent out to their customers. Dr. Gregory is at present abroad, and the cause of the difficulty has not been discovered. Dr. Christison, our Professor of materia medica, has, in the mean time, issued a notice to warn manufacturers and practitioners of the possible failure of this method from causes not yet ascertained. That the method is not essentially defective, appears from the fact, that there is at present in Dr. Gregory's laboratory, a specimen of chloroform prepared six months since, according to his method, which remains free from chlorine and quite unaltered. It is to be hoped, therefore, that Dr. Gregory, on his return, will be able to point out the circumstances under which his process fails to secure a permanently pure chloroform. Here, then, we have another most cogent reason, in addition to those previously known, why it is incumbent on every practitioner to ascertain the purity of his chloroform at the moment when it is about to be employed to produce the state of anæsthesia. Chloroform plainly belongs to a class of bodies far more prone to undergo a change of constitution by the operation of inappreciable circumstances, than the chemical bodies with which medical practitioners have hitherto been most familiar. Similar difficulties attended the introduction of hydrocyanic acid into practice; but in that case the worst consequence was merely the use of a liquid which, by decomposition, had become inert, and not, as in the instance before us, the development of a destructive agent.

THE VALUE OF A SOLEMN CONFESSION BEFORE EXECUTION.

A notice lately appeared in the *Medical Times*, of the execution at Edinburgh of Bennison, a wretched Irishman, after conviction on the double charge of bigamy and murder. Some circumstances gave rise to the suspicion that he had poisoned his first wife as well as his second with arsenic; but no evidence to this effect was given on the trial. Before execution, he made a solemn confession, admitting that he administered arsenic to his second wife on the evening of the third day before her death, while he denied, in the most emphatic manner, all hand in the death of his first wife. In consequence, however, of some information communicated to the authorities here from Airdrie, an inquiry has been made, which leaves no doubt that his first wife owed her death to poison; it appears, indeed, that nothing prevented the neighbours, at the time, from giving information of the suspicious circumstances attendant on her death, but the seeming sincerity of the very devout character which the stranger put on. It is, however, very much to be regretted that the further step of taking up the body of his first wife has not also been made, with a view to the chemical evidence. It appears that our authorities do not feel warranted to draw on the public purse for the cost of such a proceeding. If they have the power, we cannot but think this a very narrow view of such a case. Poisoning by arsenic threatens to become an epidemic crime, and we cannot conceive any better opportunity of making a successful impression on the public mind, as to the hazard of the attempt to poison by arsenic, than would have been here afforded; for the public attention was already fixed strongly on the case, and what a triumph it would have been for the law to have brought home, by the power of science, a crime of this enormity, the evidence of which had been buried for six years in the earth, to a man who had successfully practised hypocrisy throughout life, and who had died with a lie on his lips!

EPIDEMIC FEBRICULA.

There is a species of epidemic prevailing here,(a) not as yet very wide-spread, which some are calling influenza. It is a febricula, the essential characters of which do not yet very clearly appear; but it plainly has not any pretension to be termed influenza. It lasts longer than summer ephemera, but certainly belongs to the tribe of summer fevers; we shall probably see more of it ere long, and become better able to discern its true nature. Hitherto it appears to have varied much, according to the particular constitution of those affected, and thus has been mistaken for the commencement of serious local diseases, as of the chest and abdomen.

IRELAND.

THE SCHOOLS AND HOSPITALS

Have just commenced their session in Dublin. Dr. Harrison, at the School of Physic, and Dr. Jacob, at the College of Surgeons, have, according to immemorial custom, commenced on comparative anatomy; while at Cecilia-street School, Dr. Corbett, on the 2nd inst., and at Peter-street School, on the first, some one is to enliven the students with an introductory.

The hospitals, of which we lately gave a notice, commence also their clinical lectures and attendance for the winter. At Sir Patrick Dun's, which has fifty beds, Dr. Law gives the introductory clinical lecture on the 1st. At the Meath Hospital the *clinique* commences on Monday, and Dr. Stokes and Dr. Lees lecture

(a) We received this communication some weeks since from our excellent correspondent.—Ed. *Medical Times.*

through the session. Medical and stethoscopic prizes will be adjudged at the end of the course. The surgical department will be attended by Sir Philip Crampton, Mr. Porter, and Mr. G. H. Porter, Smyly, Collis, and Rynd.

The Richmond begins its clinical lectures on the 4th inst., with 300 beds, together with the Talbot Dispensary and True's establishment, so valuable to the more industrious students. The hour of visiting the surgical wards, 8 o'clock; the medical wards, 10 o'clock; four clinical lectures each week. The Jervis-street Hospital also next week; the hour of visiting 9 o'clock. In our last notice of this excellent practical hospital we were more anxious to remind the reader of the old men attached to this institution, whose writings are familiar to every one. The present physicians are Neligan and Hughes; the former, the accomplished editor of Graves' Lectures. The present surgeons are O'Reilly, Ellis, Stapleton, Harrison, Banon, Hughes, and Power. St. Vincent's, with 90 beds, much on the plan of the Paris Hospitals, with a ward for sick children, commences its session on the 1st Nov.; hour of attendance 8 o'clock; clinical lectures twice a week by Bellingham and O'Ferrall. At the city of Dublin Hospital, a course of Lectures on Military Surgery —a great desideratum in Dublin—will be given by Mr. Tuffnell. The Rotunda Lying-in-Hospital, and the South-Eastern, under Dr. Mitchell, also in the obstetrical department, offer peculiar advantages.

GENERAL CORRESPONDENCE.

THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

Sir,—Although our introduction to each other has been under circumstances not the best calculated to conciliate us, I trust our language to each other will be respectful and temperate. Had I taken warning from those who preceded me, and had I consulted my own feelings of dislike to public warfare, the present communication would not have been penned. If you will attentively read your own comments on my letter, inserted in your journal of the 19th inst., and compare them with what has previously and recently appeared in your journal as your avowed sentiments towards homœopathy, and those who practise according to that system, I think you will allow that I have good cause to anticipate that I may "get more mud than arguments." You say it is not true that the *Medical Times* has "ever refused any exposition of the doctrine of Hahnemann," &c.; and you further add:—"Some few numbers back, a correspondent, who signed himself 'One who calls Himself a Homœopathist,' having offered to answer a letter from one of our most esteemed contributors, we invited him to do so, provided he would confine himself to the examination of the fundamental homœopathic dogma, '*Similia similibus curantur.*' We now give the same invitation to Mr. Wilson; and, for our parts, we undertake to maintain against him, that this Hahnemann precept is utterly without proof—that it is a mere hypothesis, based on no sound knowledge, and unsupported by anything except the vaguest analogies or the most flimsy and ill-conducted experiments. Only, we beg Mr. Wilson to spare us any discussion on that absurd practice of infinitesimal doses, which could be proposed only by a madman, and can be practised only by knaves, or by those who are, as we hope our correspondent is, deluded by specious arguments which they have not fully analysed. We also beg Mr. Wilson to avoid any reference to cases for which he is not himself answerable." Now, Sir, I find, on referring to the numbers of your journal containing the communications of "One who calls Himself a Homœopathist," 9th July, 1850, the following passage:—"I was not aware that you admitted discussions on that subject (the truth of homœopathy) into your pages; but if you are willing to receive it, I think I could send an answer to Dr. Inglis's arguments." To which you reply in a note:—"We have given insertion to this letter, and shall open our columns to a reply; but, after that, we must decline any further debate on a subject which needs no mystifying."

And after censuring your homœopathic correspondent in no very mild or enticing terms, you give him an invitation as follows;—"Although, however, we close our pages on this point of ethics, as unworthy of further debate, we shall not object to allow our correspondent, if he pleases, to state his reasons for the opinion he professes, viz., that '*similia similibus curantur.*'" This, I presume, is the sort of invitation you also give to me. Now, as far as any exposition of the homœopathic law is concerned, I think enough has been written to satisfy any one, and that by Hahnemann himself. Let me, Sir, seriously commend to your attentive study, the introduction to Hahnemann's "Organon;" and I would recommend to your notice Dr. Dudgeon's recent translation. The introduction occupies only 108 pages, and it is printed in a beautifully clear type, which, besides the subject-matter, renders the reading and study thereof most agreeable. I would have no hesitation in saying, that after you have conquered your prejudices, and read the introduction, you will be irresistibly compelled to devour the whole invaluable work. If you should rise dissatisfied with the exposition of the homœopathic law as set forth in the "Organon," and will publicly state your objections, I will undertake to answer you; and, if not to your satisfaction, I promise to direct you further in the path that will lead to truth, and be to you a source of unbounded delight—a path that will point out to you the beautiful simplicity of the homœopathic precepts—a path, nevertheless, that will lead you to the goal from whence you will behold the philosophy of Hahnemann, and perceive the hard study, immense labour, and almost insurmountable application required, before a man can become a homœopathist such as Hahnemann was. If Dr. Inglis would take my advice, and go to work in this only philosophic way of examining the doctrines of Hahnemann, he would find that there is something more required than a "Jahr" and a box of medicines to make a homœopathist. The reluctance, however, to enter into the investigation of a distasteful subject, is well accounted for in a passage from the life of Southey: "The mass of mankind hate innovation; they hate to unlearn what they have learned wrong, and they hate to confess their ignorance by submitting to learn anything right." I hope you will excuse me if you think me dictatorial; I have no such intention of rudeness; but the course proposed has suggested itself to me, as I presume your object, as well as mine, is to arrive at truth; and I should be thankful and indebted to any one who could show me, that upon such an all-important matter as the treatment of the sick, the practice of the "most useful art the world can know," I had been "deluded by specious arguments" which have not been "fully analysed." By calm reflection, and after a little wholesome and instructive reading, we shall be the better enabled to keep our temper, and not be seduced into the use of phraseology that would betoken anger or illiberality. This course of proceeding would spare your time, and economise space in your columns; and I have do doubt that you would thereafter counsel your readers, or at all events be in a better position to direct them in their future course in regard to homœopathy. I have been further led to recommend this plan, from observing, in one of your late numbers, when discoursing concerning homœopathy, the following exposition of your own:—"The doctrines of homœopathy need no refutation. The statement which names the theory — the grave announcement that medicines act by producing effects similar to the diseases for which they are administered—may be safely left to the common sense of any man who can compare the results of the organism and of drugs, of the processes of nutrition and of pinches of powders. While the yet more astounding statement, that dividing the dose increases the power, or that causes produce effects inversely as their quantity, equally requires no comment." Allow me to convict you of error and misapprehension concerning the homœopathic doctrine as expounded in this quotation, which shows that you have either not read the writings of Hahnemann, or that you are a hasty commentator. You seem to be startled at the "grave announcement, that medicines act *by* producing effects similar to the diseases for which they are administered." There can be no question that a careless reader of Hahnemann's writings might put a construction similar to your own as to the *how* or *manner* in which drugs or remedies act when administered according to the homœopathic law; but that such explanations were not settled points in Hahnemann's own mind I will readily satisfy you; at the same time, you must allow that *facts* cannot be invalidated by unsuccessful and theoretical attempts to explain the *why* and *wherefore*. Let us hear what Hahnemann says on this subject, to which you seem to attach much importance. He says: "As this therapeutic law of nature (like cures like) is verified by every pure experiment and every true observation in the world, and the fact is consequently established, it matters little respecting the scientific explanation of the *manner in which it takes place;* and I do not attach much importance to the attempts made to explain it." He again says: "I have furnished a conjecture relative to that matter, without wishing it to be considered an explanation. Such an explanation is not necessary. It simply behoves us to apply the law, 'like cures like,' correctly and successfully, and not to boast with abstract explanations, in spite of which the patient may remain uncured." You seem to be further astounded by the fact, that "dividing the dose increases the power, or that causes produce effects inversely as their quantity." A knowledge of Hahnemann's doctrine would have prevented you falling into this error. You are aware that many substances in their crude state have no action on the human frame, but when minutely

divided by trituration and levigation, become most active agents. Need I instance fluid mercury, which may be swallowed in ounces without exciting any medicinal action; but a similar, or much less amount, when finely divided by trituration with some inert powder, would become immediately active; hence, a grain of the substance, previously inert in its crude state, although it contained the same actual amount of power or capacity of action, would not, until triturated, manifest that action.

If you attach a literal meaning, such as *strength*, to the word *power*, then you have not comprehended Hahnemann's meaning. This expression implies, according to my reading of him, the *power* or *influence* of doing good by the proper application of an appropriate dose, as you will find on reading his introduction to many of his drugs, particularly arsenic; and, from the want of this grand fact being recognised by them, the allopathists are continually physicking symptoms of their own creation. You will find that Hahnemann says, division of the active medicinal substance weakens the dose, although it increases its power, *i.e.*, to do good. Medicinal power and strength are not synonymous. Are you aware that Drs. Christian and Coindet, in giving a general view of the action of oxalic acid, assert that the symptoms differ according to the quantity given, and to the degree in which it has been diluted, "*dilution having nearly the same effect as increase of quantity.*"

I am not at all surprised that you should have fallen into error in many points connected with the homœopathic law, and which I have no doubt you will readily discover and acknowledge on finishing the course of reading I have recommended to you.

If you deplore my being in very bad company, I have to congratulate myself in having been set free from the trammels that held my mental vision in bondage; and if it be any consolation for you to know that you are not alone in your misapprehension of the homœopathic "dogma," I have to acquaint you that you have a companion in my friend Dr. Charles J. B. Williams, who has very unwisely committed himself in the *Lancet*, by refusing to meet educated men, because they have discovered and openly acknowledge the truth of the homœopathic law, and are bold enough to carry it into practice. I esteem Dr. Williams very highly, and cannot but regret that he should have disfigured his very ingenious work, "The Principles of Medicine," with such a public declaration of his ignorance of the homœopathic law as set forth in the following passage:—"There is something, too, very fascinating in the notions of homœopathy: *similia similibus medentur*. Who cannot fail to admire the expansive genius of Hahnemann, who discovered that the best cure for a disease is the influence which caused it?" Now, Sir, I hold these very unpardonable blunders, to be committed by men of learning and reputation in the nineteenth century. They manifestly show that the doctrine of Hahnemann has not been read, much less studied, and very much less understood. Now, why should such neglect prevail? Some of my friends have suggested to me, that it is well homœopathy should meet with opposition and distrust until it is securely established by experience. What is meant by experience? The result of trials, I should presume. Would it not, then, be more scientific and Christian-like, if each qualified practitioner were to come forward and lend a helping hand in this work of experience, which promises such great results to diseased mortals? If the authorities of the large London hospitals acted wisely, they would not only establish a clinical chair, to be filled by the election of *concours*, thrown open to every homœopathist who might compete; but they would also give him a ward. This would soon settle the question of who were "fools," knaves, and "dupes," and be of incalculable service to society at large, which is now unhappily at warfare with its best interests. No doubt, the Homœopathic Hospital, now being established, will ultimately be decisive; but I for one must proclaim my abhorrence of this insane warfare about the best method of treating the sick, no matter by what name it may be known. Be assured the public will know the results of this unhappy dispute.

It is not my purpose, and I hope that no one will compel me, in self-defence, to quote renowned dead and living authorities, to show the bewildering uncertainty of allopathic medical practice. Calm investigation is far preferable to angry disputes about words and opinions. You have further invited me to explain to you why I deserted your ranks, which I will as briefly as possible attempt to do, although to do ample justice to myself and your request would require me to compress into this letter two years' hard reading and experimentation. You can readily understand how a practitioner in large general routine practice will every now and then discover that a patient has become weary of his medical attendant, and that he will occasionally seek other advice; and that of a homœopath, it may be; this was sometimes the case with me! These patients will often present themselves before you quite cured, although you had unsuccessfully exhausted your surgery or medicine upon their cases, and your own patience as well as theirs. Notwithstanding these gentle and ominous hints, that the state of Denmark was not sound, I at one time, as too many others now do, treated such lessons with utter contempt. Nor is this to be wondered at, seeing I had received the first rudiments of my medical education in the University of Edinburgh, a school famed for its adherence to the pathological and therapeutical principles of the olden time, hallowed by length of years for a firm tenacity of practical rules founded on those principles, the soundness of which it would be deemed nothing less than rank heresy to impugn, or even to question. Under such circumstances, it is not to be wondered at that I conceived a strong bias—nay, an almost invincible antipathy—to the pretensions and claims of the new sect called homœopathists. At one time I went so far as to write an article against them. As time rolled on, however, and after having experienced the bewildering uncertainty of the tenets and principles in which I had been educated, my mind began to waver not a little, and I could not help deploring the unsatisfactory nature of the practical results presenting themselves to my observation in the course of professional experience. My own health, through severe labour, began to suffer, and I had the kind advice of the most able men in London. Some told me my lungs were affected; others told me that I was poisoned with the malaria of Pimlico; some recommended me to retire into the country, others to sleep out of town. All sorts of medicine were prescribed for me, which I credulously swallowed until my confidence at non-restoration to health failed me. At this juncture, I happened to read a very excellent work, entitled "Life, Health, and Disease," by Dr. E. Johnson, then practising Hydropathy. I was so pleased with his common-sense writing, that I purchased his very clever work on Hydropathy, which I read attentively; and this led me to ask his advice, as I had then abandoned medicine, feeling I was daily getting worse. He recommended to my notice some very simple hygienic means, under which I soon improved, and was able to continue my practice. This sadly shook my confidence in physic, and I had now had an opportunity of verifying in my own person, perhaps fortunately, what ever seemed to me an anomaly in medical practice, viz., that, although several eminent practitioners might agree as to the nature of an affection—for, at least in mine, several agreed—yet they all *differed* as to the mode of treating me. This circumstance made me a thorough liberal in medical science; and, having at this time witnessed some of the extraordinary powers of mesmerism, I determined to prejudge no man who might differ with me in medical practice until I had examined his claims. Accordingly, I sat down and read everything that came in my way, and to me the homœopathic law seemed so full of truth, and so completely to comprehend within its immense domain every other system, that I at last came to the conclusion that it was, in fact, the true directing medium, through which the various remedial measures nature had so bountifully placed at our disposal, could be scientifically selected and applied for the treatment of every curable disease.

After making myself thoroughly acquainted with its principles, I undertook experiments on the sick for nearly four years before I avowed my adhesion. The trial in practice was to me a most harassing and painful proceeding, especially when I for the first time encountered severe and acute cases. The truth of the law was, however, soon made manifest, and some of my first essays were made with allopathic medicines in reduced doses. If you will allow your prejudices to calm down, I will have much pleasure in relating some of those cases, as well as others treated daily by allopaths homœopathically, although they are not aware of the fact any more than they are of the greater influence and certainty of infinitesimal doses, which fact I now venture to mention to you, in the hope that you will not consider me a "madman," "knave," nor one who is led away by "specious arguments" which I have not analysed. I assure you there is no delusion in the results which honest men have recorded. Before I avowed my conviction of the truth of the homœopathic law, I had made 12,000 practical observations, with every determination to upset the doctrine, if possible. I may observe, for the satisfaction of those who would at once like to know something of the recent arguments between the allopathic and homœopathic disputants, that the admirable letter of Professor Henderson to Dr. Forbes will afford nutritious food for mental digestion. Those who require at once practical proofs of the power of homœopathy in acute diseases, are recommended to study Tessier's work on "Pneumonia and Cholera," recently published; and Dr. Ozann's masterly Analysis of Tessier's Practice, and the Comparative Statistics of Allopathic and Homœopathic Treatment, recently published in the *Homœopathic Times*. After we have had a little further acquaintance, I beg to predict you will not again say that "this Hahnemannian precept is utterly without proof; that it is a

mere hypothesis, based on no sound knowledge, and unsupported by anything except the vaguest analogies, or the most flimsy and ill-conducted experiments." As you have given me a direct challenge, which I have, for the cause of truth, accepted, I beg to give the allopathic hospitals another, upon the results of which I will venture to stake the merits of homœopathy, and the capability of diagnosis in my own person. I will name a few gentlemen to assist me, and who shall see that no unfair play is exercised in the experiment. I challenge any hospital in London to place ten or twenty beds at my disposal. This, to my homœopathic brethren, may seem a rash experiment, and undue confidence in my own powers; I am, nevertheless, perfectly willing to be subjected to the most rigid watching and severe criticism; and, in case of failure, which would prove my ruin, to bear the stigma and disgrace, with all the attendant results.—I am, Sir, &c. DAVID WILSON.

Brook-street, Oct. 21, 1850.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—GENERAL PRACTITIONERS.

"Æsopo ingentem statuam posuere Attici,
Servumque collocarent æterna in basi,
Patere honores scirent ut cunctis viam."

[To the Editor of the Medical Times.]

SIR,—It would not be unreasonable to expect that medical men of all others would be least likely to give undue weight to conventional or factitious distinctions, and so far well disposed to regard those only which were based on moral or intellectual excellence. Few men are so familiar with the various phases of that power which annuls all other distinctions; few so constantly reminded of the "equo pede pulsat pauperum tabernas regumque turres," which so truly defines his relation to the whole human family. Even disease is a great leveller; and, whether seen on the bed of down or the pallet of straw, is apt to strip off all extrinsic investments, and to lay bare the common attributes of the creature (man.) Nor does it appear to me, Sir, that the expectation is altogether unrealised by experience. When we survey the profession as a body, few men can be found elsewhere who, whilst they concede a courteous and respectful submission to the laws and customs of society, evince a more general possession of that under-current of thought, that really reflecting "ego," which, examining and comparing, ultimately values things and persons according to their true relations.

It seems strange, therefore, that in a society composed almost exclusively of medical men, chartered with powers, entrusted avowedly for the common benefit of the public and the profession, distinctions should have been made alike curious and inexplicable, and which, whilst they circumscribe the powers of the association in regard to the interests of science, impede, by the infusion of an element of discord, any attempt to establish harmony and good feeling in the profession.

I allude (to use no stronger term) to the anomalous position awarded by the Council of the Royal Medical and Chirurgical Society to gentlemen who are engaged in general practice; I say, by the *Council*, because there is not the slightest pretext afforded by the charter for the restriction in question. The *bye-law*, however, declares, that the Society shall consist of physicians, surgeons, and general practitioners, (as if there were none of the latter surgeons,) but that the number of general practitioners shall not exceed *one-third* of the Society. I need scarcely say, that the absurdity of this regulation is balanced only by its illegality and injustice. It is obvious that, in a charter intended for the benefit of *the whole profession*, if *any* limitation had been observed in the distribution of the privileges it conferred, justice would have required that the largest proportion of fellowships should have been distributed to the most numerous class. Again, if it were assumed that the varied duties of the general practitioner left him less time for contributions to the "Transactions" and other objects of the Society, it would have been a much more likely mode to have elicited a liberal quota of contributions from a class thus impeded, to have *increased* the relative proportion of their numbers. Besides these, there are many other objections, on which I need not insist, which on social no less than on financial grounds, demonstrate the restriction to be alike unwise, ungenerous, and (as it seems to me, Sir) ungentlemanly.

It is, however, admitted, that *one-third* of the Society may consist of general practitioners; but, as this seems suggestive of some distrust, we are led to examine the composition of the various councils, to see what share these gentlemen have been allowed in the government of the Society; and here we begin to see a little of that "working" of the Society which it is our object to exemplify.

Now, from the formation of the Society to the present time, the aggregate amount of names (counting repetitions) amounts to 966 but the number of individuals amounts only to 202, giving, therefore, data by which we may proximately infer the average number of times that each person has been a member of council. Out of the whole, I can only find the *names* of twenty-four gentlemen who were engaged in general practice. Whatever be the explanation of this, we have so far narrowed the space for that investigation which will be the subject of a future letter. Now, Sir, supposing that there had been nothing else which was impolitic or repulsive in the Society, could we have been surprised at the significant fact announced to us last session by Dr. Webster, that last year we had only had eleven candidates for admission. I fear, Sir, that, whatever view we take of the ungenerous restriction in question, the conclusion must be very unfavourable to the wisdom or justice of those to whom the *charter* has been entrusted, and that we shall in vain look in any place *but one* for any analogy—but of that hereafter.

I should be sorry to appear opposed to distinctions in the profession, but I heartily wish they were regulated alone by upright conduct and examinations in honours. Few, I trust, would more cheerfully concede, or more resolutely claim, as the case might be, the rights or duties of his own position. Neither have I any idea that retailing drugs, or opening a *facade* of prismatic symbols, in the shape of blue or red lights, is calculated to shed any more lustre on the respectability, the light, or the science of our profession. But, Sir, though I cannot admire the taste of the blue bottle, I am equally unable to see any crime in it. But, if the foregoing be, indeed, undignified enormities, it should be recollected, that multitudes of general practitioners neither practise the one nor exhibit the other, whilst they constitute a body of men inferior in intelligence and uprightness to no other in the community. It is true that in some general practices there are certain features of trade which one would like to see abolished; but every one who has given the smallest attention to the subject knows that, in the present state of the public ignorance, the abolition is well-nigh impossible, and that to no one are such features more repulsive than to many of the highly-respectable men on whom they are imposed. The only parallel in absurdity to the rule which would *exclude* a man because he *is* in general practice, seems to be that which makes a man an hospital surgeon *because* he *is* an apprentice.

But if general practice be, in certain cases, compulsorily encumbered with the characters of trade, may we not inquire if there be not some *voluntarily* adopted elsewhere? Is there no trade in the hospital system, and that, too, of the most unblushing and repulsive description? Should no other correspondent do so, I will endeavour, in due time, to answer these questions. In the mean time, I would respectfully beg the Council of the Royal Medical and Chirurgical Society to take broader and more liberal views, and at once repudiate those who would restrict the distribution of fellowships, or any honours which the charter may empower them to bestow, by any considerations based merely on the relative duties of this or that section of the profession.

Every man is liable sometimes to be placed in positions which are anything but those he would desire; but no man need ever be forced to any which involve a compromise of his self-respect or the honour of his profession. It is only when we voluntarily leave the plain path of our honest and useful duties, or try to anticipate fruits alone to be healthfully matured by patient industry, by more common but less legitimate proceedings, that we create distrust either in learned societies or the public, or justify that sport which induced a wag to suggest that certain of the medical F.R.S. should be honoured with the additional title of "£ S. D." No, Sir, no one ought to be more fully convinced than the Council of the Society, that the most lowly of the occupations of our profession cannot be without honour; that many of our duties were selected to typify the Divine goodness and power; and that, whilst they tend to awaken the best sympathies of our nature, they can alone be achieved by the application of those still extant miracles—the laws impressed on our nature by the Divine Being. The Council, however, may be assured, that to the successful cultivation of this power, even to the narrow limits of human faculty, many things are yet necessary. That "spiritual wickedness exists in high places" as truly now as it did in the time of the Apostle to the Gentiles, and that it must not be supported, still less *flattered*, — that the gifts of intellect are restricted to no class or clime, but that, when given, they only prove inoperative or mischievous, unless supported by moral power,—that "the kingdom founded in the sciences" is open to all, but can only be visited with advantage by those who are appropriately equipped for the journey,—that there is every reason to believe that, whether for sustaining our powers or protecting us from danger, that the best panoply consists in humility of mind, earnestness of purpose, and purity of motive.

Again, I would earnestly beg the Council to recollect also, that any attempt to classify the distribution of privileges, by any standard drawn from the nature of our ministrations, can only embitter our mutual relations, and provoke a retributive scrutiny, dangerous to no one more than to some who, in a worldly sense, occupy high stations; and that lastly, if there be things which tend to sow the seeds of mistrust in the minds of a slowly awakening public, or which are calculated to degrade a profession,—if, for example, the mantle of charity and the robes of science be sometimes made to cover and promote designs essentially mercantile,—if sometimes the ministerings of science be divided into those which may be practicable in the so-called public institutions, and those which are inappropriate for private practice,—if there exist examples of ingratitude to instructors and benefactors, uncharitable indulgence of carping at our colleagues or our brethren, of sowing crude, sceptical insinuations broadcast amongst the younger members of the profession, or of the sacrifice of the love of everything great and noble to the love of lucre,—that such things, rare though we trust they be, may be more auspiciously sought in other quarters, than among what are usually intended by the "general practitioners of the profession."—I am, Sir, &c.,

SPECTATOR.

IRREGULAR MATURATION OF THE VACCINE PUSTULE.

[To the Editor of the Medical Times.]

SIR,—Perceiving the subject of irregular maturation of the vaccine pustule has for some time past been noticed in your valuable paper, and wishing to add any little information I may possess on the subject to the general fund, I send you the following cases, which, should you consider them of sufficient interest to your numerous readers, you can transfer to your columns.

On the 6th of last July I vaccinated, at a neighbouring village, two healthy children, with virus obtained from the National Vaccine Establishment. On the 13th I again visited the children, and, finding the pustules in both cases had arrived at maturity, proceeded to vaccinate a large number of subjects assembled at the school-room,—the small-pox being prevalent in the village at the time,—with the lymph thus obtained. On the 20th I again visited them, and, on examination, found that vaccine pustules had developed themselves, and had arrived at maturity in all the cases, with the exception of five. In each of these five cases there was no appearance of pustules. Concluding the virus had failed to act, I re-vaccinated them. On the 24th, (which was the eleventh day after primary, and fourth after re-vaccination,) I found, much to my surprise, three of the five cases with full grown pustules on the old punctures, while the marks of the recent ones had altogether disappeared. On the two remaining cases, the old punctures were a little inflamed, while, as in the other cases, the recent marks were not visible. On the 26th, these two cases presented the appearance of full-grown vaccine pustules. Wishing to test the efficacy of the matter thus irregularly produced, and know its influence on the constitution as a proteetive, I again vaccinated the five, but failed to produce the slightest mark of inflammation in either of them. I vaccinated several subjects from those five, and in all the pustules arrived at maturity at the usual time. Since then, I have observed several cases of similar irregular maturation.

I am, Sir, &c., D. P. HERLEHY.

Litcham, Norfolk.

[To the Editor of the Medical Times.]

SIR,—Mr. Postgate, of Driffield, relates, in the last number of the *Medical Times*, some cases of irregular maturation of the vaccine pustule; and in the first, in which maturation was only completed on the eleventh day, I observe he states the child to have been "a fine, healthy-looking child." This reminds me of one case in particular, which occurred in my own practice in the country some years since, in which maturation did not take place until the *fourteenth* day after vaccination; this, also, was a remarkably fine child, and I think the explanation is to be found in the hypothesis, that absorption is less readily effected in the arm of a fine (*i.e.* fat) than of an ordinary child. I distinctly recollect using fresh matter in this case, so that the irregularity could not be attributed to any inertness on its part.

I did not revaccinate, because, when the pock passes regularly through its different stages, as it did in this and several other similar cases, I think it cannot be necessary; and I suspect that, had not Mr. Postgate revaccinated so early, or when it may be presumed the system was still under the influence of the first virus, the result would have been different; this, however, is a point for further investigation. Should a similar case again occur to myself, I would certainly try its effect, but not quite so early. My opportunities are now fewer; for I was at that time a country union surgeon; a period of my existence, thank God, at an end. I trust, however, Mr. Postgate will pursue his inquiry, which is one of considerable interest, and favour us with the result on some future occasion. I enclose my card, and am, Sir, &c.,

J. S. M.

London, October 21, 1850.

PENETRATING WOUND OF THE THORAX WITH SUBCUTANEOUS EMPHYSEMA.

[To the Editor of the Medical Times.]

SIR,—On Thursday, 5th September, about noon, I was requested to visit E. M., aged about fifteen years, who had met with a severe accident in Old Durham Coal Pit, by a large quantity of stone falling from the roof upon him. He was immediately removed to his home, about a mile from the pit, and put into bed. When I arrived at the house, a few minutes after, on examination, I found his pulse was almost imperceptible at the wrist; breathing very laborious, with considerable puffing out of his lips, and making a noise similar to what is heard when children are playing and making a noise by vibrating their lips. His face and eyes were ecchymosed. There was a wound about 2½ inches long on the right side of the chest, about four inches from the sternum, which, penetrated the cavity of the thorax, between the fifth and sixth ribs. The air passed in and out of the wound with considerable noise every time he breathed. From this wound the blood flowed rather freely, but not in a sufficient quantity to require any means to be adopted to arrest the hæmorrhage. Emphysema of the breast, extended up to the neck, but not to any considerable extent. He had a convulsive attack about every five minutes, during which time the whole of his body was affected, and he appeared to be in great pain, although he was quite unconscious of what was going forward in the room. My first object was to endeavour to restore the powers of life; and for that purpose I gave him brandy and brandy and water, as soon as he could be made to swallow it. This had the effect of restoring him a little, and, as soon as the bleeding from the wound in the chest had subsided, I drew the edges together by suture and adhesive plaster, taking care to close the wound at the moment when the air appeared to be pressed out by the motion of the chest, and applied a compress and bandage over the plaster. I gave him a dose of calomel, gr. x., which was put into his mouth, and washed down with a little brandy and water.

6 p.m., five hours after the accident, appears more conscious; breathing less oppressive; no increase of emphysema; pulse 96, very weak, and easily compressed. Ordered to take thin oatmeal gruel, and to be kept perfectly quiet; warm flannels to his chest, and a cloth, wet in cold water, to be applied to his forehead.

Friday, 8 a.m.—Has passed a quiet night: all convulsive action has ceased; thirst great; tongue coated; no pain in the head; emphysema less; no pain in the wound, excepting when the body is moved; micturates freely; bowels not relieved; complains of general soreness all over the chest and abdomen, but cannot fix the pain in any part in particular. Ordered him a saline purgative, and to be kept quiet; same diet.

2 p.m.—Symptoms much the same; bowels have not acted.

9 p.m.—Again visited. Thirst urgent; drink asked for very impatiently; has been sick, and vomited twice; no blood in the matter ejected. Ordered to continue the purgative and diet.

Saturday, 8 a.m.—Passed a quiet, and, on the whole, a comfortable night; slept for two hours at one time; appears quite himself; has not the least recollection of the accident; no pain in the wound, excepting when the body is moved; thirst less; pulse 90, more volume, but soft; skin natural; tongue cleaner; emphysema nearly gone; more cheerful; bowels not relieved. Ordered to continue the aperient; have an enema, if necessary; same diet.

12 noon.—Bowels well acted on without the enema; other symptoms much the same.

8 p.m.—Everything looking favourable; thirst less; pulse 84, soft, and easily compressed; no pain in the wound, excepting when the body is moved; general soreness much better; emphysema nearly disappeared; tongue nearly clean.

Sunday, 10 a.m.—Progressing favourably.

8 p.m.—Ditto.

Monday, 9 a.m.—All symptoms are favourable. Ordered him the aperient, as his bowels have not acted for twelve hours.

8 p.m.—Progressing favourably.

Tuesday, 1 p.m.—Pulse 78, soft; tongue clean; thirst nearly gone; emphysema disappeared; no pain; can move his body without feeling any pain in the wound.

From the last date, recovered without one unfavourable symptom; the wound quite healed; and when I saw him to-day (Oct. 4) he said he was quite well.—I am, Sir, &c.,

Durham, October, 1850. GEORGE SHAW.

ADVICE TO STUDENTS.

[To the Editor of the Medical Times.]

I have read with much pleasure your address to the medical students of London, at the commencement of the session just entered upon. Your remarks on what you justly term the "moral aspect of a student's life," appear to me to be peculiarly valuable and worthy of attention; and I only regret that you have not expanded them to greater length and with more minuteness of detail. Will you permit me to suggest a hint or two upon this most important subject, in the hope that they may possibly attract the notice of some of your younger readers? If but one should be led to adopt and act upon them, these lines shall not have been altogether unprofitable.

Very many medical students have occasion to regret, for some time before they go up for examination, that they have not kept up the knowledge which they had acquired at school of the Latin and Greek languages, and they have, in consequence, to submit to the irksome drudgery of re-acquiring them at a time when their hours and thoughts are fully occupied in the pursuit of strictly professional details.

The same remarks hold true of not a few medical men after they have passed through their examinations, and have entered upon practice. The advice you give to translate every Greek and Latin sentence that occurs in their reading, and invariably to make themselves acquainted with the etymological meaning of all technical words, will do much to prevent the loss of what has been once known, and even to make some progress in classical attainments; for he who never passes a Greek or Latin quotation without translating it will, in nine instances out of ten, be disposed to turn to the author from which it has been taken, and look at the context. But to make the thing doubly sure, let me strongly recommend to my younger brethren the practice of reading every morning before commencing the studies of the day, a chapter in the Greek or Latin Bible. A double good will thus be attained by one act; the memory will be strengthened, while the heart is improved. I can assure them, that if they will but make a trial of this simple plan, they will find it alike most easy and most instructive.

The second hint is of a piece with the former; but its importance, in my estimation, is still greater. It is the result of all experience, in regard to prolonged physical as well as mental labour, that a greater amount of sustained exertion will be endured, without injury to health, if there be a regular pause or suspension at stated intervals of time. The cessation of work on one day out of the seven has been found to be an act of worldly prudence, if I may so speak, as well as it is known to be a duty of sacred obligation; the wisdom of the appointment is, in short, as great as its beneficence. He who acts in accordance with its requirements, will find his advantage in a secular point of view, independently of the special blessing which ever attaches to an humble obedience to the Divine commandments. I would, therefore, most earnestly urge upon the medical student to lay aside all his professional and technical studies on that day, which is so appropriately known as the day of rest from labour—and there are few more laborious occupations than that of the diligent disciple of medicine—and betake himself to the pursuit of, and meditation on, works which, while they refresh his thoughts and feelings, will tend to elevate and spiritualise them. The special duties of the day will not, of course, be forgotten. What an admirable remark is that of Bacon, "Thy creatures have been my books, but thy Scriptures much more. I have *sought* thee in the courts, fields, and gardens, but I have *found* thee in thy temples."

In conclusion, let me remind the student that the great object of education is to discipline the heart and understanding, as well as to store the memory and sharpen the senses. In a recent conversation which I had with the distinguished chief of the Medical Department of the Navy, he remarked that the main defect he found among the young surgeons who came before him for examination, was not any want of strictly professional information, but an insufficient acquaintance with those branches of general instruction which strengthen the reasoning powers, and give precision and accuracy to the mind in the analysis of facts. He attached great importance to a well-grounded knowledge of mathematics and the connected sciences, observing that he should have more confidence in the ultimate success and usefulness of a man so instructed, and possessing only a moderate amount of professional knowledge at the time of his examination, than of one who did not fail in a single question put to him, but whose preliminary and accessory education was imperfect. He added, that if he had to begin life himself again, he should pay much attention to the study of the exact sciences. A remark like this, from such a man as Sir William Burnett, should not be lost upon any medical student who may chance to cast his eyes over these few lines.

London, October 15. VIGILANTIUS.

ON A NEW AND EFFECTUAL MODE OF PRODUCING DIAPHORESIS.

[To the Editor of the Medical Times.]

SIR,—The difficulty, and in many cases the impossibility, of restoring the skin to its healthy action, and thereby removing from the system, in the form of perspiration, a vast amount of effete matter—matter which, when retained, produces serious disturbances—deprives the practitioner of a very powerful weapon in the treatment of certain diseases. The remedies which, from their acknowledged sudorific character, are resorted to, become, from their failure, sources of additional irritation, by acting on the already over-excited kidneys, and producing increased congestion in them. The most effectual means, and, so far as my experience has gone, a never-failing means, of producing diaphoresis under such circumstances, is to envelope the body in impermeable piline. Even in diabetes, this material has proved of the greatest service, which alone would be sufficient proof of its efficacy to entitle it to a place in the list of our diaphoretic remedies. But its good effects have been so frequently manifested, not only when the whole body has been enveloped in it, but in cases of a local character, where the cutaneous exhalation has been suppressed, as, for example, in the hands and feet, causing the patient very great discomfort and inconvenience, that I feel myself fully justified in strongly recommending it to the attentive consideration of the profession. The most convenient mode of applying it is by means of the bag, or "sudatorium," as I propose to call it, which I have had constructed. It is made in the form of a sack, to fasten round the neck, having sleeves attached to it, and with the seams perfectly air-tight.(a) The material may also be made into any shape, such as a cloak or morning-gown, to answer the same purpose, and, for local application, into socks, gloves, sleeves, knee-caps, shoulder-caps, &c., all of which latter articles are of great value in rheumatic affections. I am, Sir, &c., ALFRED MARKWICK.

Langham-place, September 26, 1850.

THE ARTERIES OF OLD PARR.

[To the Editor of the Medical Times.]

SIR,—In the report of the proceedings of the Medical Society of London, given in the last number of your Journal, it is stated by Dr. Crisp that the arteries of old Parr "were mere cylinders of bone." I have referred to Harvey's account of the *post-mortem* examination of Parr, both in the Latin edition of Harvey's works and in that of the Sydenham Society, and find no mention whatever made of the state of the arteries. It is mentioned that the costal cartilages, which are commonly ossified in advanced age, in this instance were flexible.

If the arteries of Parr were preserved, and are now in the Museum of the College of Physicians of London, an account of them would possess interest. I can imagine no other source of information—apart from the writings of Harvey—open to Dr. Crisp.

I am, Sir, &c., J. D.

Lesketh How, Oct. 28, 1850.

DR. SCOFFERN'S SUGAR REFINING PROCESS.

[To the Editor of the Medical Times.]

SIR,—In the published report on Dr. Scoffern's lead process for refining sugar, I see the following remark by Mr. Brande:—"That the objects attained by Dr. Scoffern's process are equally attainable by other perfectly unobjectionable methods, I cannot admit." I conclude, therefore, that Mr. Brande cannot be informed of Mr. Oxland's process for refining sugar by the acetate of alumina. Every object stated to be attained by the lead process is, and will be shown to be, attained by Mr. Oxland's process, whenever any one will take the trouble to visit his refinery, which is small, but instituted for the

(a) This may be seen at the Epithem Company's Office, 32, King William-street, City.

purpose of exhibiting the process. That it is perfectly unobjectionable, no one can deny; and that it perfectly attains the object, the results will show. I have seen sugar refined there first-rate in colour, crystal, and weight, and that with most imperfect means.

The extreme cost of the agent necessary for refining a ton of sugar is 4s. Time, labour, and space for machinery, are very greatly economised, *and the use of blood and animal charcoal are entirely dispensed with.*

The protein compounds, with the colouring matter, are precipitated by the alumina, and a larger quantity of crystallizable sugar, from 7 to 10 per cent., is obtained. I have no hesitation, therefore, in stating, that Mr. Oxland's process is beyond the possibility of objection. That it reduces the refining of sugar from being, as described to me by a refiner, a most clumsy and unscientific process, to being absolutely perfect, from its economy, its facility, and its uniform effectiveness.—I am, Sir, &c. CHEMICUS.

THE MEDICAL AND SURGICAL PRACTITIONERS' SOCIETY.

[To the Editor of the Medical Times.]

SIR,—The manliness and public spirit with which you have exposed, from time to time, the shameless conduct of the Medical Protection Office, entitle you to the gratitude of every member of our profession. Your faithfulness to our interests will be rewarded. The profession are too easily duped, and seem positively to delight in the process, in accordance with the old Hudibrastic principle, that

"The pleasure is as great
Of being cheated as to cheat."

I understand, Sir, that, notwithstanding all you have written, one Mr. O'Reilly, the managing man of Brearey's office, and, as I am told, the getter-up and *factotum* of the celebrated Mail Delivery Office, has had the audacity to attempt the establishing of another Medical Protection Office somewhere in the locality of Foley-place, and that he had actually sent round circulars to the profession, and found men silly enough to confide their accounts to him for collection. This hornets' nest must be dispersed, and every member of it driven beyond the limits of the profession.

If the profession honestly wish to dissociate themselves from disreputable connexions, and to protect their own interests, they will effectually put down all such attempts as those I have referred to, by joining the Medical and Surgical Practitioners' Society, a Society founded and directed by medical men, and subjected to an excellent code of laws, which, faithfully administered, will secure the interests of all the members. The men now at the helm are, for the most part, well known to the profession, and worthy of all confidence, and I trust that the Society—to which I may add I have entrusted my own accounts—will be warmly supported, so that, by union and co-operation in a truly fraternal spirit, we may promote the common good.

I say, then, to all my brother members, rally round the Medical and Surgical Practitioners' Society, and defeat all the efforts made by a set of cunning adventurers to impose upon your confidence. As an evidence of what this new Society is doing, it has collected for me, since its formation, 12*l.*, from among a mass of debts which, whilst in the hands of the defunct Medical Protection Office, brought me exactly twelvepence. I was informed at the office, last week, that it was going on prosperously, and I have no doubt, if the profession do their duty towards it, that it will prove a great boon.

I am, Sir, &c., PHILO.

USE AND ABUSE OF THE SPECULUM.

[To the Editor of the Medical Times.]

SIR,—During the last session, a paper was read at the Medico-Chirurgical Society, "On the Use of the Speculum in the Diagnosis and Treatment of Uterine Diseases." A very animated discussion followed;—the most opposite opinions were very strongly expressed, and facts positively asserted on the one side, were with as little hesitation denied on the other; and this, too, in language which was by no means always temperate. But the correspondence which has followed goes far beyond this. The most serious charges have been brought forward, the most dishonourable motives have been imputed, and the most personal language has been indulged in. The disputants having at length exhausted their present stock of abuse, are silent from necessity rather than from choice. And now I would inquire, What good has arisen from all this? An important error was committed at the outset. The subject brought under notice should not have been *the use and abuse of the speculum*, but rather *the affections of the os uteri and neighbouring parts, their nature, diagnosis, and treatment.* This, indeed, is what the question has at length become,—a question which still remains undecided, or rather upon which the most contradictory facts are advanced as true. I am now considering the question as raised amongst a body of scientific men, who respect the honour of their profession, and who study the welfare and happiness of their patients. That the speculum in the hands of certain persons is abused for the worst of purposes I have little doubt, but neither will reason nor public exposure affect them. Their end is *gain*, and they will pursue their practices, uninfluenced by all attempts at suppression, so long as the public will supply them with victims. It must not be imagined that the recent stir which has been made concerning the speculum will at all tend to check their proceedings.

Those who devote more than an ordinary share of their time and attention to the study of a particular class of diseases, are very liable to overrate their importance, and perhaps to exaggerate the frequency of their occurrence. This is more especially the case, if we imagine (as we generally do) that we are pre-eminently learned in their nature and treatment. The affections of the os uteri have been for some time past a very fashionable subject of inquiry, perhaps because the investigation was commenced in France (a) and I have no doubt; that in many instances the inquiry has been pursued with an amount of zeal only excusable when combined with honesty and candour. On the other hand, this class of diseases is most disgracefully slurred over by many practitioners, who would no more think of using a speculum than they would a stethoscope, and who profess to hold the employment of both instruments in supreme contempt. We are all very prone to ridicule what we do not understand, and among the evils attendant on the recent discussion, the opportunities it has afforded for humour and sarcasm, are not the least. Let this discussion become noised abroad, and it will require no small amount of moral courage to propose the use of the speculum. It will seem like recommending Morison's pills or Holloway's ointment, plus immorality and indecency. Those persons who really stand in need of such restraint are, as we have before said, beyond it. The blow falls harmlessly where it was intended to strike, but inflicts wounds in its descent without cause or purpose. Heaven forbid! that we, in the exercise of our profession, should ever be the means of slurring the fair fame of England's women. We have no light weight of moral responsibility to bear. Unbounded trust and confidence are reposed in our honour. How shall we dare to abuse so sacred a power? and be it remembered, that we equally fail to discharge our duty, either by evading it or by overstepping the boundary of legitimate inquiry.—I am, Sir, &c. O. P. Q.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

October 29, 1850.

DR. ADDISON, President, in the Chair.

ABOUT sixty fellows of the Society assembled in the library, on Tuesday last, at 3 p.m., to receive and consider certain resolutions submitted by the Council respecting the alterations recently made in the building occupied by the Society. The first resolution empowered the trustees to sell out 600*l.* stock, to meet the expenses consequent upon the completion of the lease and the repairs of the premises, as authorised by two general meetings of the Society, held on May 1, 1849, and July 11, 1850. This was carried unanimously. The second resolution proposed, that the front drawing-room be appropriated to the general uses of the Society, and that the evening *conversazioni* and the meetings of the Council take place there. This proposal caused some opposition. Mr. Arnott contended that the Society was not in a position to keep the house entirely, and that great difficulty would be experienced in letting the upper part, unless the

(a) Notwithstanding what has been asserted to the contrary, the speculum is still much abused in Paris. Women affected with the venereal disease who apply for admission at a certain hospital are, as a matter of course, examined with the speculum, and in no very decent manner. The word *montez* is given, and they ascend to a table, somewhat like that used for lithotrity, and are placed in a very similar position to the one employed in that operation, with the legs widely separated, (the feet being in shoes) before a window, and in the presence of numerous students. These proceedings we witnessed during the autumn of last year.

front drawing-room were included in the let. In a financial point of view, he thought it would be more advantageous to have a tenant for the rooms; and that other measures might be adopted that would be more useful. For instance, the library tables might bear the newspapers and other periodicals, and the library itself should be kept open from 9 a.m. to 6 p.m. He was opposed to converting the Society into a medical club, as they had not cash enough to effect that object, nor did he think it would be in accordance with the objects of the Society. A few *conversazioni*—say four or six in the season—apart from the ordinary meetings, might prove attractive. Dr. Bushnan supported the project of Mr. Arnott, with the exception of letting the apartments. He thought it beneath the dignity of the society to become *lodginghouse-keepers*. The Secretary stated, that the only additional expense would be for gas, as there was sufficient furniture, unless the Society wished for luxuries. An objection was raised against the admission of newspapers, as it would entail a heavy expenditure, and be nearly unnecessary. The scientific and literary journals alone should be purchased. Bookshelves might be fitted up along the sides of the room, as the library was already crowded, and space was wanted for the display of the books. As some doubts had been expressed as to the position of the Society in a financial point of view, and its ability to retain this apartment, the Treasurer stated the income to be nearly 1,200*l.* a year, subject to diminutions, because some of the members were entitled to pay a small composition, of which privilege twelve or thirteen had already availed themselves, and twenty-nine more were entitled to do so, each year adding to their number. The ordinary expenditure was about 1,000*l.*, to which, in some years, was to be added the amount expended in books; an amount altogether under control, and which might be increased or diminished at pleasure. The recent changes would add to the ordinary expenditure, and perhaps cause it to amount to 1050*l.* a year. The Secretary stated, that letting the room in question would add but slightly to the income derivable from that source. The resolution was finally carried, by a majority of 25. The third and last resolution authorised the Council to let the stables and such part of the house as may not be required.

An alteration of the by-laws was then proposed, to increase the number of referees from 24 to 36. An attempt was made to throw open the reference to the fellows of the Society generally, but was defeated. After a good deal of discussion, the alteration was adopted, and, after a vote of thanks to the President had been carried, the meeting broke up.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

Saturday, October 26, 1850.

Dr. J. R. Bennett, President, in the Chair.

Thirty-seven new fellows were elected, and several certificates in favour of new candidates were read. Among the latter was one recommending Dr. Grant, Professor of Comparative Anatomy at University College, as a honorary fellow of the society.

ENORMOUS FATTY TUMOUR.

Mr. Haynes Walton exhibited a specimen of enormous fatty tumour, weighing 15 lbs., which he produced, he said, more as a curiosity, than to illustrate any point in surgery or pathology. The man from whom it had been removed had been admitted into several hospitals, purposely for its extirpation, but apparently his nerve was not equal to undergo the operation. Its growth commenced about twenty years ago, when he was 30 years old. In March last he first applied to Mr. Walton to remove it, but, as there were then suspected signs of pulmonic affection, he declined operating. In July, however, his cough having left him, he again sought to be freed from his burden; and this time, after a consultation, at which it was decided the operation was justifiable, it was performed. The tumour was of large size and quadrilateral figure, and had a large base, around which it measured three feet. It occupied a large part of the right lumbar and gluteal regions. (A cast taken a few days before the operation was exhibited by Mr. Walton.) The integuments were divided by two transverse and one vertical incision. The investing capsule was peculiarly dense, and so adherent, that not a particle of the connexion could be torn through, but required to be carefully dissected, especially as strong septa passed between, and tightly embraced the small lobes that covered its surface. A considerable quantity of blood was lost, not from the arteries that supplied it, for they were small, but from the emptying of the blood with which it was filled, like a sponge. The man was very low for several hours subsequent to the operation, but afterwards rallied. The density of the capsule, its firm adhesion, and the vascularity of the tumour, Mr. Walton referred to the irritants which had been applied, and to the pressure the man had subjected it to, by means of a belt which he had worn to support it.

Mr. Pilcher read a paper on

CERTAIN AFFECTIONS OF THE NERVOUS SYSTEM SIMULATING CHOREA.

Case 1.—In August, 1847, Mr. Pilcher saw a young man, aged 20, in Berkshire, born of healthy parents, and living in a healthy district, who was affected with slight erratic movements of the upper limbs and face. There was also, apparently, extreme dyspnœa; the breathing was stertorous, and inspiration appeared to require the most laborious exertion of the muscles: expiration was less laborious. This had lasted for several months, without interruption, except during sleep. Walking was very difficult, though the patient could keep himself erect with very little assistance. He was treated in various institutions, and had now in a great measure recovered; the following was his condition on October 20, 1850:—The bowels, urine, and appetite were all right; sleep good; pulse rather quick; face flushed; he blushed easily, and considered himself very nervous. No cause could be assigned for the affection.

Case 2.—Mr. J. M——, a respectable tradesman of Chelmsford, in 1827, had a severe attack of bilious fever; and, in the next year, had occasional very slight "unpleasant" feelings in his head, when sitting in a confined posture. Two years after this, the feeling had become more intense; he could not sit at ease without putting his hand to his head, though without being able to assign a reason. After this, when he was sitting in a confined posture, the head would "give a sudden snatch" to the left side; and this was always prevented when he was able to keep his hand applied to his head. In 1841, the affection had become much more severe, but frequently did not recur when the patient most feared it. Various treatment—leeches, aperients, iron, nitrate of silver, electricity, &c.—had been tried, but with at most only temporary success, and the disease still continued unabated, up to the present time. It was mitigated in severity by mild tonics, and occasional aperients; and increased by nervous excitement, powerful purgatives, and depletion. There was an elevation of the right shoulder, with fulness over the right scapula, probably arising from the excessive action of the muscles of that side, especially the trapezius. The trapezius and sterno-mastoid muscles of the left side appeared partially paralysed. The patient had felt no pain in the head or neck. Two analogous cases, in females, furnished to Mr. Pilcher by Mr. Lavies, were also read. The patients had recovered under tonic treatment.

Remarks.—Mr. Pilcher believed that ordinary chorea was an affection of the excito-motor system, and mostly produced by eccentric irritation; but in the cases now related, no eccentric cause could be assigned; the disease seemed essentially functional. He compared the choreic affection, to a certain extent, with the hysterical affection of joints, described by Sir B. Brodie; the alliance appearing to exist in the disorders being similar in character, commencing in the brain, but affecting different parts of the nervous system; the sensory nerves being affected in one series of cases and those of volition in another. That they were brain, or mental affections, seems proved by their occurrence in persons of weak mind, or in those whose intellects, naturally powerful, had been overworked; and, by the success obtained by renovating the mind, either through the medium of the body, or by directing it to more healthy occupations. No tenderness of the spine had been observed by Mr. Pilcher in the first two cases, nor could any mental cause be assigned.

A discussion afterwards ensued on the merits of the paper, in which Dr. Winslow, Dr. Thompson, Dr. Lankester, and Messrs. Hird, Hunt, Dendy, and others, took part. The general impression seemed to be, that the cases narrated by Mr. Pilcher were not instances of genuine chorea, but anomalous cases resulting from disturbance of a centric origin. Dr. Winslow referred them to disorder of the spinal cord, and stated that cold affusion on the spine was the best remedy. Dr. Thompson considered, that in many cases the blood was at fault. He had found cod-liver oil serviceable. Chorea may be of either centric or eccentric origin. If there be tenderness of the spine, leeches and blisters to the

part are of use; but the principal things to be attended to are, to correct the secretions, improve the tone of the digestive functions, and support the strength by good diet and mineral tonics. Mr. Pilcher considered, that in his cases, the disorder affected volition; having its seat in the brain only, and not in the entire cerebro-spinal axis.

KING'S COLLEGE MEDICAL SOCIETY.

Dr. Arthur Farre in the Chair.

The first meeting of this Society for the present session was held in the large dining-hall of the College. Dr. Jelf, the principal of the College, was present with Professors Guy, Partridge, and Bowman, and a large body of students and visiters.

Dr. Farre stated his satisfaction at being President at the 17th anniversary of a Society, which he announced to be in a very prosperous condition. He recapitulated the advantages accruing from such a combination of students, and invited those present to join it. He then called upon Mr. Henry Smith to read the introductory address, of which the following is a brief abstract.

"It is obvious, that in any great seat of learning, where numbers are congregated to fit themselves for the prosecution of some particlar profession, an interchange of sentiment and a free discussion on the important subjects to which their energies are being directed, must be of the greatest service to the students; and under no circumstances, perhaps, are they more demanded than when the study is that of medicine; because, in this instance, we have but few broad and defined principles to guide us. Each one holds his particular opinion on some of the most important points of doctrine or of practice; in fact, medicine is, to a great extent, what it was long ago termed, a conjectural art.

"There are, however, other and important advantages which accrue to those who are thus brought together. Members are joined in the bonds of friendship, in all probability to last not only during the time they are studying, but, perhaps, for many a year to come.

"Another advantage results from the discussions which are carried on by the members of a society like this. They learn to express themselves clearly, and acquire the habit of collecting and arranging their ideas.

"These are some of the advantages and objects attainable by those who belong to a society of this description, and I apprehend they would form an incentive to all my hearers to belong to it. Those only, however, who are willing to impart knowledge and to learn, and who earnestly take interest in the studies of our profession, will either do good to others or themselves by belonging to a Society whose sole aim is to increase knowledge. There is no professional study which requires a greater amount of intelligence and application than that of medicine, but fortunately, although there are so many difficulties in his way, the student of medicine may overcome them all by the exercise of industry in his pursuits; aye, and this is the case even if he possess only moderate talents. It is true that the man who has a quick perception, a vigorous memory, and a vivid imagination, has the vantage ground; but, if he have nothing beyond these, he will not succeed well in our calling. He may be able to build up theories which fall shortly, to be succeeded by others equally beautiful and equally visionary; but the man who gives his unwearied attention to his studies, although he may not be possessed of these fine qualities of the mind, will far outstrip the brilliant theoriser in that knowledge which is necessary for the practice of the healing art.

"If the practitioner has, when a student, failed to make himself acquainted with the practical part of his profession, he will find himself in anything but an enviable position when called upon to give an opinion or to act upon emergencies or in difficult cases. The man who has not, by unwearied observation, laid up a store of facts, will be *constantly* making mistakes, periling the lives of others, and getting himself into disrepute. When we know but little, we are apt to consider ourselves as complete storehouses of learning, and thus are led on, with an unwarrantable boldness, to aim at effecting those objects which, in the vanity of our imagination and in the pride of our ignorance, we deem to be right, but which, in reality, are mere delusions; and it is only when, by constant industry, careful observation, and practical experience, we really begin to know something, that we are able to feel what pigmies in knowledge we are. Fortunately, as has been said with respect to a more substantial but baser article, 'Creseit amor nummi, quantum ipsa pecunia crescit,' and this it must be confessed is true with regard to the knowledge of our profession; we love it the more we become acquainted with it; we delight in the steps by which we gain it; we enjoy it when gained; and, finally, we contemplate with pleasure the inestimable blessings which a true knowledge of our noble science brings home to others as well as to ourselves.

"Recollect, that almost all the students who have distinguished themselves in this school of learning, have not only belonged to this Society, but have been active members of it. I will merely call to mind some of those who have been members within my own time. There is the name of George Johnson, who was an active member of it when I first joined it, and who obtained the Society's prize by his Essay on Auscultation. I may mention the name of Henry Salter, who holds a prominent position in the college as your teacher, and whose acquirements need no eulogy from me. His brother, James Salter, was one of our active members, and is distinguished for his talents and acquirements. We also numbered amongst us Thomas William Nunn, whose name, I am sure, will call up pleasant recollections in the minds of those of you who had the good fortune to be under his tuition in the anatomical rooms. I can also mention to you the name of my valued friend, Samuel Sumner Dyer, who was one of our most active members, and who, on an occasion like the present, delivered the opening address. We have amongst us now the names of John Wood, William Pardley, and George May, of all of whom we are justly proud.

"Finally, gentlemen, let us all bear in mind the extent of that we have to learn, and let us all keep and nurture the feeling of the immense dignity and responsibility of the profession of medicine; let all our proceedings in this Society be so carried on that they will conduce to the mutual advantage of its members, and assist us in the acquisition and culture of knowledge."

Mr. Druitt rose with much pleasure to move a vote of thanks to Mr. Smith; he had no doubt that all present had listened to the address with the same pleasure which he had felt himself.

The motion was briefly seconded by Dr. Arledge, and carried unanimously.

Mr. Samuel Griffith moved a vote of thanks to the Rev. the Principal, the Dean, and the medical professors and visiters, who had honoured the Society with their company.

Mr. John Wood had much pleasure in seconding this motion. He was glad to see present some of the professors who had formerly been members of this Society. He more particularly alluded to Mr. Bowman, the distinguished Professor of Physiology.

Dr. Jelf (the Principal of King's College) begged to return thanks for himself and his brother professors, if they would permit him to call them so. He had the greatest pleasure at being present at this meeting. It was with feelings of surprise, but still more of satisfaction, that he found himself, though unskilled in the science of medicine, at the head of a large medical school. He had no doubt that this Society would prosper.

Mr. Headland moved a vote of thanks to Dr. Farre. He was sure that no eulogium was needed in the case of a professor who was so well known and esteemed. As a student and office-bearer of the Society, he was grateful for the attendance of the eminent men he saw around him.

Mr. Henry Smith seconded the motion, and,

Dr. Farre having returned thanks, the Society adjourned.

MEDICAL NEWS.

Self-supporting Dispensaries.—Sir Benjamin Brodie has joined the London Society for promoting the establishment of these institutions, as one of the vice-presidents, and given a donation of 10*l.* 10s. to the funds.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—A half-yearly general court of the members of this Society, was held at the Gray's-inn Coffee-house, on Wednesday, October 23rd, Sir Charles Mansfield Clarke, Bart., M.D., the President, in the chair. The annual ballot for the election of the court of directors took place, and, in

the room of the six senior directors, who retire in rotation, the following gentlemen were elected, viz., Dr. Cape, Dr. A. J. Sutherland, Messrs. Braman, Lane, Clifton, and Bird. Thanks were voted to the auditors, and to the acting treasurer, Dr. W. Merriman. The President announced, that, in consequence of the lamented death of the patron, and in compliance with the wish of the court of directors, he had written a letter of condolence to H.R.H. the Duchess of Cambridge. This letter, with its answer, was read, and contained a judicious allusion to the claims of the medical profession. It was resolved, that H.R.H. the present Duke of Cambridge, be respectfully invited to become the patron of the Society. At the conclusion of business, the President very feelingly called attention to the fact that the Society's grants to widows and orphans of deceased members, amounting to 780*l.* for the current year, were derived almost entirely from the contributions of members of the Society themselves, and not from the public, who were too apt to forget the services of the medical profession when not actually needed.

Obituary.—At Poona, on the 14th September, Surgeon G. Ledingham, 83rd Foot. In August, Assistant-surgeon G. Allender, M.D. On the 5th September, at Bolarum, Surgeon A. Walker, M.D., attached to His Highness the Nizam's army, in consequence of a fall from his horse. In Bengal, Dr. D. Logan, surgeon to the Nepaul Residency, (date not stated.) On the 10th inst., in Norfolk-street, Glasgow, Dr. Thomas Cunningham, suddenly, from congestive apoplexy. May 20th, at Crookwell, Goulbourne, Dr George Yarnold, M.R.C.S.L., aged 38.; he held an appointment under Government in the Emigration Department for some time; afterwards, in August 1842, he arrived in the colony, where he soon attained considerable repute. His decease was regretted by all parties. On the 15th inst., in Pulteney-street, Bath, Charles Hunnings Wilkinson, M.D., aged 87. At Port Essington, Dr. Clarke, surgeon to Her Majesty's ship Meander. On the 25th inst., at Enfield, Middlesex, Dannett Asbury, Esq., M.R.C.S., aged 23. Mr. Asbury died after three days illness, from the poisonous effects of a wound received during a *post-mortem* examination. On the 27th inst., at Ipswich, John Ranson, Esq., surgeon, aged 33.

The Cholera in England and Elsewhere.—In last week's *Medical Times*, we mentioned the occurrence of some deaths from cholera among the soldiery in Hull. The disease first appeared among the shipping, and has since attacked a number of localities in Sculcoates, Witham, and Drypool. From the end of August to the present time, (Oct. 26,) upwards of 30 deaths from cholera, and about 25 from diarrhœa, have occurred, and this only in one portion of the borough. It has been stated, that since the disease made its appearance during the present outbreak, there have been nearly 100 from all gradations of the disease. The deaths from cholera have been lately seven or eight a week; but, in one day, no fewer than fourteen persons died of cholera and diarrhœa. Fatal cases have also occurred in other towns. Its spread to other parts of the kingdom, as in previous visitations, is anticipated. It is still very prevalent and severe at Cephalonia, and some other of the Greek isles. From the reports received from Tripoli, it appears, that from the first the disease was of the most aggravated character, attacking without any premonitory symptoms; the attacked immediately dying. The Arabs, while at work, fell down and expired before assistance could be rendered, and without external discharges or cramps, a deadly faintness seizing them suddenly. So universal was the fear, that all who could, fled the place, the most destitute alone remaining. All the authorities disappeared, except one or two of the consuls; the sick could with difficulty be discovered, and when found, could hardly be persuaded to take medicine. No reasoning could prevail upon them to cleanse or purify their wretched dwellings. The victims were among the poorest classes of inhabitants. In the country whole villages were depopulated. A curious fact was ascertained by an English traveller, that the dogs were similarly subject to an epidemic disease—numbers dying with vomiting, watery discharges, and cramps; in fact, from cholera, which was preceded by dulness, loss of appetite, and disinclination to exertion. In Misellata, about seventy miles from Tripoli, there were rather more than twenty cases of canine cholera, and a great mortality among the fowls, death being preceded by a yellowish discharge from the mouth.

Seventy cases of cholera have occurred on board the Queen flagship, R.N., and twenty-five deaths. The disease is, however, disappearing.

Several cases of yellow fever have occurred in vessels belonging to the Royal Navy, and their prizes off the coast of Africa, some of which have proved fatal.

Lectures on Deformities, &c.—Our readers will be glad to learn, through our advertising columns, that Mr. Chance is about to deliver a course of lectures at the Royal Orthopædic Hospital, "On the Nature, Causes, and Varieties of the Deformities affecting the Human Body." We are also gratified to be able to announce, that these lectures will appear in our pages.

Cambridge University.—The examinations for the licence *ad practicandum in Medicinâ* will commence on the 4th Nov., at 10 a.m., and continue on that and the three following days. Candidates for the degree of M.B. will be examined at the same time by the Regius Professor of Physic, the Professor of Anatomy, and the Downing Professor of Medicine.

Hampshire County Lunatic Asylum.—The committee of magistrates appointed to superintend the building of the new lunatic asylum in Hampshire, have purchased Knowle farm for the site, at a cost of 5,550*l.*, and entered into a contract for the erection of the building for the sum of 33,786*l.* Sinking the well, paying for and putting up the steam-engine, the apparatus for warming, ventilating, cooking, and brewing; the erection of the gas-works, furniture, architect's commission, &c., are estimated at 10,363*l.* in addition; the amount required in round numbers being, therefore, 50,000*l.* This sum has been borrowed from the Sun Office, at 4 per cent., on the security of the county-rates.

Forty-five pounds were recently received as the product of two charity sermons for the Isle of Wight Infirmary.

Singular Advertisement.—The following singular advertisement is found at the back of a recent number of *Schmidt's Jarbucher*, and, as we suppose it is open to reply from any quarter of the world, we draw the attention of those of our readers who are in possession of the *arcanum* in question to the request:—"To Physicians.—Whoever is cognizant of a means that has already really cured *scirrhus intestini recti annularis*, (from which disease an old lady has been suffering for a year,) and will kindly communicate the same to R. H., at Herman Fritzche's, bookseller at Leipsic, may confidently rely, in the case of its successful application, upon the gratitude of an anxious family." Poor old lady! She will be overwhelmed with *soi-disant* cures of an incurable disease!

Dr. Williams and the Homœopathists.—The *Bulletin de Thérapeutique* has the following remarks upon Dr. C. J. B. Williams' refusal to meet a homœopathic physician in consultation:—"One of those questions in dentology, which are of frequent occurrence in practice, and the solution of which is not always unattended with difficulty, has recently presented itself in England. A physician openly practising homœopathy calls in consultation a *confrère* who believes homœopathy to be a deception and an error. What ought the latter to do? Dr. Williams has furnished, under these circumstances, an example we would fain see imitated on this side the Channel. Called in consultation to a lady supposed to be affected with disease of the heart by a homœopathic physician, he did not hesitate to refuse the invitation; and these are the terms in which he replied to it. (Here follow extracts from Dr. Williams' letter.) We do hope this noble example of the English physician will not be lost sight of, and will be the means of preserving us from a repetition of those acts of cowardice and capitulations of conscience of which some of our celebrated practitioners have been guilty."

No More Smoke.—At a late meeting of the Town Council of Manchester, it was stated, as a result of prohibiting the smoke nuisance as it regards factories especially, that the present appearance of that borough presented a most remarkable and pleasing contrast to what it was formerly, and that this improvement had been effected with positive advantage to the manufacturers; in one instance twenty-eight tons of coal, and in another forty, being the actual weekly saving resulting from the manufacturers' consuming their own smoke, and by other improvements consequent thereon. The Smoke Suppression Acts do not apply to Ashton, Bolton, Bradford, Halifax, Stockport, Warrington, and the majority of towns in the manufacturing districts; but, after these statements, it will become a question with the promoters of sanitary improvements, and even the Legislature itself, whether the present measure shall not be extended to those towns, and even to London, which should no longer be abandoned to smoke and all other uncleanliness.

Epidemiological Society.—At a meeting of the Council, held at the residence of Dr. Babington, the President, on Friday, the 25th of October, the laws were finally determined upon, and ordered to be printed. The report of the committee appointed to specify and arrange the objects proposed to be accomplished was ordered to be published. A committee was appointed for general purposes, and for appointing, arranging, and directing sub-committees of special inquiry on various subjects; and it was resolved,—"That a sub-committee be forthwith appointed to investigate the highly important phenomena of small-pox and vaccination."

The cholera is still prevalent in Scinde, Mooltan, and some districts of India. It has also appeared on the south side and in the centre of Cuba, where the negro population is very numerous. It has proved very fatal among the slaves. The health of the troops at Hong-Kong is improving. The 59th European regiment has lost ninety men since its arrival in the colony—eighty-two of these by fever, and that chiefly within the last two months. The disease which has caused this mortality was confined to the 59th regiment, neither the engineers nor the artillery suffering. It being at last evident that the outbreak of fever depended on the crowded and unhealthy barracks, the authorities engaged a vessel to serve as subsidiary barracks. It will sleep from 100 to 150 men. Had this step been taken early, the lives of the soldiery might have been saved, and their money [value to the country, from 10,000*l.* to 12,000*l.*, preserved.

Sea-Scurvy.—An inquiry by means of a coroner's inquest, has been lately made into the cause of death of a Lascar on board the barque, New Liverpool, lying in the Southampton docks. From the evidence it appears that twelve Lascars were engaged at Moulmein at certain stipulated wages, and certain rations, consisting of rice, fish, and dholl, (a kind of split peas,) ghee, chillies, and tamarinds. They were also to have curry stuff, tea, sugar, and coffee. For the first two months their food was supplied regularly, and they had three meals a day. After that there were not any ghee and tamarinds left, and they had to eat pork instead. Two meals also became their allowance, instead of three. Sea-scurvy in consequence broke out among them, and, in consequence of the want of what are called "medical comforts," continued to rage until their arrival in port. The Lascars did not have any lime-juice, which was reserved for the white crew, but were supplied with mixed pickles, which they could not eat, because these hurt their mouths. The stock of preserved potatoes,—a very useful remedy in scurvy,—lasted only a fortnight,—at least, so far as the Lascars were concerned. The fish with which these unfortunate men were supplied, and which they had been eating for ten weeks, was very bad, and unfit for food. It was taken on board at Moulmein from a ship's stores, and was then unfit for use; the cockroaches were eating it. When examined at the inquest, it was found to be only fit to be thrown on a dunghill, being rotten, full of vermin, and stinking most horribly. The rice was of a most inferior description. Notwithstanding this, the Lascars slept on deck, or in the forecastle; were at work all day, and expected to be at every call on deck during the night, and were so; and were not always permitted to go to their berths in the forecastle. While the scurvy prevailed among them, they had sago, arrow-root, soup, and gravy. The disease was confined to the Lascars: not one of the white men, who were supplied with lime-juice, and had better food, was affected. One of the Lascars died at sea, and two in port. The place where they lay is thus described in the *Hampshire Independent*:—"A more shocking and disgusting sight has hardly ever been witnessed on board a ship, than that which presented itself to the eyes of the coroner and jury, when they went to look at the body of the deceased, as it lay rolled up in a rug in the forecastle. The stench was intolerable; and two poor fellows, one of whom has since died, lay in the greatest agony close to their dead comrade." Mr. Wiblin, F.R.C.S., who was sent to see the deceased, proved that he died from scurvy, caused by salt and bad provisions, and hard work. The following is his account of the *post-mortem* examination:—The external appearances of the body presented nothing which would lead me to infer that he came by his death by unfair means. The whole surface of the body was covered with petechial spots, showing the extravasation of blood from debilitating causes. The appearance of the gums, one of the most prominent and marked features of sea scurvy, was spongy, and of a livid hue, and the gums were separated, to a great extent, from the teeth. The integuments of the inferior extremities were greatly thickened; and under the surface of the skin was an effusion of red-coloured serum. The surface of the body and other parts were covered with a peculiar scaly eruption, indicative of sea-scurvy. The eyes were suffused, of a yellow colour, but not prominent. The brain appeared to be perfectly healthy, but its coverings were, apparently, more opaque than natural. On opening the chest, the organs presented a tolerably healthy appearance; but on opening the pericardium it was found to contain a somewhat larger quantity of fluid than natural, whilst the heart itself was of a much paler colour, and more flaccid than usual. The auricles contained fluid blood, and there were fibrinous clots in the ventricles. The lungs were perfectly healthy. The abdomen was next examined, when nothing of an unusual appearance presented itself. The upper surface of the liver was strongly adherent to the diaphragm, but the organ itself was perfectly healthy. The stomach was considerably distended, and, on opening it, was found to contain about three-quarters of a pint of dirty-looking grumous fluid. Its lining membrane was of an exceedingly pale colour, and not in any way resembling its healthy and natural appearance, from which a medical man would be led to infer that it (the stomach) had been deprived of one or more of the alimentary principles which are necessary for the maintenance and repair of the animal economy. The gall bladder was slightly distended with healthy bile. The spleen was somewhat congested with fluid blood, and readily lacerable. The intestines were healthy, and contained perfectly-formed and healthy fæces. The blood-vessels contained a remarkably small quantity of fluid blood. Mr. Wiblin, after concluding his account of the *post-mortem* examination, proceeded to state that the deceased died from sea-scurvy, induced by a diet of a deteriorated quality, in which there was a deficiency of succulent vegetables, or of that most important and necessary substitute, lime or lemon juice, the absence of which never fails to entail on those who make long sea voyages that most painful and distressing malady, once so prevalent, but now happily so rare, sea scurvy." There was of course no surgeon on board. A verdict of manslaughter was ultimately returned against the master, Captain Rowles.

HEALTH OF LONDON DURING THE WEEK.

The total number of deaths registered in the metropolitan districts, in the week ending last Saturday, was 845. This number is lower than in any of the corresponding weeks of ten years (1840-9) except those of 1841 and 1845, when the deaths were less than 800; and it is much lower than in the same week of 1843 and 1848, when they rose above 1100. The present return shows a decrease on the average (corrected for increase of population) of 171 deaths. Taking the three classes of maladies, which together destroyed more than half of the 845 persons who died last week, namely, the epidemic, the tubercular, and those which affect the respiratory organs, it appears that, though there is a decrease in each of them, it is still most remarkable in the epidemic. In this class the deaths enumerated are 188 (of which 137 occurred amongst children), whilst the corrected average is 256. Small-pox continues to exhibit much less than the usual amount of fatality; most of the other complaints mentioned are near the average; typhus a little exceeds it. The continued decline of diarrhœa and dysentery is shown by the returns of the last three weeks, in which were successively registered 57, 37, and 30. Last week three deaths were recorded from cholera. It deserves to be noticed that, on the 13th, 18th, and 23rd October, three infants, in different houses, were found dead in bed, or died suddenly in bed, all of them the children of single women.

MORTALITY TABLE.

Deaths in the week ending Saturday, Oct. 26, 1850.

(Metropolis.)

Causes of Death.	Oct. 26.				Sum of Ten Weeks.
	0	15	60	All Ages	
All Causes	368	297	169	845	9028
Specified Causes	367	296	169	832	9250
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	137	34	17	188	2352
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	4	23	14	41	502
Tubercular Diseases	39	92	15	146	1671
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	40	27	30	97	1041
Diseases of the Heart and Blood-vessels	4	25	9	38	279
Diseases of the Lungs, and of the other Organs of Respiration	68	30	22	120	1380
Diseases of the Stomach, Liver, and other Organs of Digestion	15	25	9	49	594
Diseases of the Kidneys, &c.	...	9	10	11	83
Childbirth, Diseases of the Uterus, &c.	...	8	...	8	117
Rheumatism, Diseases of the Bones, Joints, &c.	...	1	2	3	62
Diseases of the Skin, Cellular Tissue, &c.	1	1	1	3	12
Malformations	1	1	...	2	19
Premature Birth and Debility	22	...	...	22	215
Atrophy	17	...	...	17	153
Age	...	...	37	37	504
Sudden	9	11	...	20	80
Violence, Privation, Cold, and Intemperance	10	9	3	22	186
Causes not Specified	1	1	...	13	58

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	Oct. 26, 1850.	Sum of Ten Weeks.
London...	1948369	845	9308
West	301189	137	1348
North	376568	158	1604
Central...	374199	144	1635
East	393067	158	2209
South	503346	248	2512

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	16	Heart	36	Phthisis.....	114
Bronchitis	54	Hooping-cough ...	24	Pneumonia	45
Cholera	3	Hydrocephalus ...	19	Scarlatina	22
Childbirth	4	Influenza	1	Small-pox	5
Convulsions	35	Liver	12	Stomach	5
Diarrhœa	27	Lungs	6	Teething	3
Dropsy	13	Measles	24	Typhus	49
Erysipelas	4	Paralysis	26	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deatbs.	Births over Deaths.
Males	693	417	276
Females	669	428	241
Total.....	1362	845	517

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·764	47·1	42·0	+ 0·1	W.	N.N.E.	Miles. 140	0·00	Nothing was shown throughout the day.
Monday	29·851	43·8	35·5	— 2·7	N.N.E.	N.N.E.	135	0·00	Nothing was shown throughout the day.
Tuesday.....	29·886	42·8	36·8	— 3·2	N.N.E.	Calm.	85	0·00	Nothing was shown throughout the day.
Wednesday.	29·073	41·8	39·4	— 3·7	S.W.	N.	75	0·74	Nothing was shown throughout the day.
Thursday ...	29·156	38·6	36·8	— 6·5	N.W. & W.	S.S.E. & N.E.	140	0·15	Negative, with weak tension at noon.
Friday	29·331	40·7	36·2	— 4·0	N.E.	N.E.	40	01	Positive, and tension weak, at 3h. p.m.
Saturday ...	29·573	41·1	38·3	— 3·6	N.	N.	85	0·00	Positive, and tension moderate, at 9h. p.m.
Means ...	29·519	42·3	37·9	— 3·4	N.E.		SUM 700	SUM 0·90	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications have been received from—

Dr. Venables, of Finsbury-circus, "Explanatory Observations for a more Speedy Collection and Adjustment of Urinary Sediments—Spontaneous and Artificial—for Microscopical Examination, and for their more prompt and immediate Diagnosis."

Mr. R. Austin Bankier, of H.M.H.S. Alligator, Hong-Kong, on "Caries and Exarticulation of the Foot at the Ankle."

Mr. Charles Taylor, South London Medical Society Prize Essayist, on "Infantile Remittent Fever," &c.

J. J. M.; A Correspondent on Blood-stains; Reprints of Papers on Prophylactic Education; Mr. Campbell, late of the 55th Regiment; Dr. Waller, of Finsbury-square; Dr. Dillon, of Bath; Dr. Chapman, of Grosvenor-street; J. D., of Lesketh How; A Constant but Non-Medical Reader; Dr. Mair, of Crieff; A Lover of Fair Play and no Favour; Mr. R. Austin Bankier, of H.M.H.S. Alligator, Hong-Kong; Mr. Charles Taylor, of Bethel-place, Camberwell; J. P. D.; Spectator, Letter 4, on "The Royal Medical and Chirurgical Society;" Dr. Davies, of Bath, on "Pericarditis;" Mr. Cadge, of University College Hospital, on "Impermeable Strictures;" J. D. C., on the "Cholera at Malta;" A Practitioner, on the "Medical Protection Office;" Mr. King, of Bath, on "Craniotomy;" Mr. Forsyth, of Carrickfergus, on "Wounds of the Stomach;" Mr. Henderson, on the "Preparation of Crania," we hope to find room for next week.

Dr. Mair's paper on "Ptosis and Amaurosis" will be acceptable.

Dr. Waller on Placenta Prævia will appear next week.

J. P. D.—It is utterly impossible, however willing we may be to comply with the request, to answer our correspondent's queries. He must be guided by general principles, and judge for himself.

A Lover of Fair Play.—Next week.

Mr. Dobell's paper on Homœopathy shall be published as soon as possible.

The very interesting Introductory Lecture of Dr. Goodfellow, delivered at the Middlesex Hospital, is in print. Its length, and our other engagements, oblige us to delay its publication. Dr. Gavin's introductory lecture then remains for publication, and will, for this season, complete our series.

Human Blood.—In the evidence of Professor Taylor, of Guy's Hospital, relative to the late murder at Doddinghurst, he is reported to have been asked by one of the jurors the following question, viz., "We are all of us liable, in our business, to get spots of blood upon our clothes from animals. Will you tell us, would there be any difference between the blood of a man and the blood of an animal?" And to this Dr. Taylor is said to have replied, "None whatever." It is not requisite to stop to inquire whether the juror did or did not consider "man" to be an "animal;" the purport of the juror's question is evident, and, of course, was understood by all; but one would like to know, whether, in these days of microscopic discovery and investigation, it is generally thought that that juror's question was correctly answered, supposing the Professor's answer to be correctly reported. It may be inquired, too, whether any other process was used to distinguish the blood-stains than that mentioned, which appears chiefly to have been the discovery by the microscope of 'small, dark-red coagula, resembling hardened or clotted blood, and presenting the glistening or shining character of dried and clotted blood."—(Morning Herald, Oct. 18.) The assertion, that the soiled spots were blood-stains is very decided. The Professor's reported words are—"The stains or spots referred to under 1, 3, 7, and 9, have been caused by blood. This is proved by the colour of the stains, and the presence of a clot in them." It would be also interesting to learn, whether any of the "hardened" coagula spoken of were subjected to any softening influence—if so, whether the blood-globules were examined as to shape, size, odour, &c. &c.?

A Constant but Non-medical Reader.—Where all are good, it is not easy to select. The patient may be sent with the greatest confidence to the hospital nearest his residence. We have no faith in specialists.

Dr. Chapman, of Grosvenor-street.—We have received a letter from this Homœopath, in which the following sentence occurs:—"In reference to your comments on my note, which you have published, I observe that I did not mean to say that therapeutics formed no part of medical science. You cannot be ignorant that all the qualified British homœopathic practitioners (I mean those that have diplomas and certificates of medical education from respectable medical universities, colleges, and halls,) must have had the same education as their allopathic brethren, not excepting allopathic therapeutics." Dr. Chapman also adds, "you will find my name, and such titles as *I chose to use*, in the 'Provincial Medical Directory for 1848,'"—these, we observe, are "M.D. Edin., and M.A. Camb., 1835." Homœopath, Dr. Chapman, then, does not "choose to use." Is he ashamed of it? Neither does he "choose to use" his title of M.R.C.S., the only one, be it observed, that absolves him from the charge, which, in ignorance that he was a member of the College of Surgeons, we made of his being an "illegal practitioner." We will take every opportunity of making known to the Profession Dr. Chapman's claims and pretensions.

We receive many newspapers. It would save much time if our Correspondents would kindly take the trouble to mark either with the pen, or to cut with the scissars, the paragraphs to which they wish to call our attention.

An Old Subscriber, Holyhead.—The essential constituent of Dupuytren's Pomade is cantharides. There are several formulæ for its preparation, which our Correspondent will find at length in the "Druggist's General Receipt-book."

ORIGINAL LECTURES.

CLINICAL LECTURES ON SURGERY,

AT

ST. BARTHOLOMEW'S HOSPITAL,

October 10, 1850.

By W. LAWRENCE, F.R.S., etc.

(Reported by Mr. HOLMES COOTE.)

SERO-CYSTIC SARCOMA OF THE MAMMARY GLAND.

I had occasion, gentlemen, yesterday, to remove from a lady, otherwise healthy, the right mammary gland, converted into the irregularly lobulated fungous mass which you see before you. The patient, aged 55, of naturally pale complexion and nervous temperament, but well made and of active habits, noticed in the right breast, thirty years ago, a small knot, the size of a filbert, which, remaining stationary, caused her no inconvenience until about four years ago, when it slowly increased and became occasionally painful. She put herself under the care of a surgeon in her neighbourhood, who found her in a depressed state of mind about some supposed affection of the heart, and weakened by previous depletory treatment. He gave her iron and tonic medicines, under which her health improved, but the tumour in the breast grew slowly, and about the spring of the present year had attained considerable size, the integument covering it being raised into irregular prominences and discoloured. Then ulceration ensued, and from the opening there protruded a red fungous mass, from which rather free bleeding took place on three or four occasions soon after its appearance; it has not bled since. The inconvenience which she experienced in being obliged to keep this heavy mass always slung from the neck; the pain from the friction of the dress, and the annoyance of bearing about so large a substance, which poured forth a profuse secretion, induced her to come to town and place herself under my care for the purpose of having the part removed.

The right breast, as you see, is enormously enlarged, the increased bulk being caused by a diseased state of the mammary gland. About one half of the swelling at its base is covered by integument, thinned by distension, but not unhealthy nor morbidly adherent. The other half is a vast fungous protrusion, measuring about eight inches in its transverse diameter by five or six in the vertical direction. This is bounded by a raised collar, the thickness of the thumb, in which the integument and the diseased mass are completely blended. The exterior and the convexity of this elevated boundary are covered by a thin and perfectly smooth epithelium. The interior surface and the excavation which it bounds are nearly smooth and raw. Before removal it was a pinkish red, and not very sensitive; it yielded a thin yellow discharge, not offensive, but so abundant as to require change of dressing three or four times in the day. The mass, being pendulous, lay over the lower part of the chest and neighbouring portion of the abdomen, of which the integuments, constantly wetted by the discharge, were bright red and partially excoriated.

The breast, which was not painful when examined, was moveable upon the subjacent parts, and there was no glandular enlargement, nor any trace of disease in the axilla. The health was good; the patient slept well, had a fair pulse, and ate and drank with appetite.

Under these circumstances I had no hesitation in recommending the operation; for, although it might at first appear formidable to undertake the extirpation of so large a growth, yet two incisions embracing the neck of the tumour, which was overhung by the protruding mass, were sufficient for the purpose. There would be no great loss of integument, no depth of wound, nor any exposure of the axilla.

The patient having assented, the operation was performed October 9. She was placed on a couch in the recumbent posture, and chloroform was administered. The breast having been drawn up and well supported, in consequence of its size and overhanging position, by a folded towel, the under incision was first made and the skin turned back: then followed the upper incision, carried along the body of the swelling, so as to form a flap nearly three inches wide, when the whole mass was readily separated by a few strokes of the knife from the loose and healthy areolar tissue which connected it to the subjacent pectoral muscle. Several arteries bled freely, but were quickly secured, so that there was no considerable loss of blood. The edges of the wound came nearly together, and the patient was put into bed. There was some bleeding in the evening caused by sickness, with vomiting; but it ceased on the application of cold, and she passed an excellent night.

The breast, which weighs 2lbs. 6oz., presents at its base a firm lobulated mass. I now cut into it through the middle to show you the internal structure. You see that it has undergone that morbid change called cystic sarcoma. It is a firm lobulated mass, composed of various sized cysts, filled, in the specimen now before you, with a soft friable, vascular substance of light yellowish grey colour. The cyst-walls having been distended and thinned have given way, and have allowed the protrusion of the red fungous growth which, with everted edges, occupied the front of the patient's breast. The nipple is concealed amongst the folds of integument.

The disease, which is of innocent nature, commences by enlargement of the lactiferous tubes in the substance of the gland. These become tortuous and varicose, and the naturally oily secretion which they contain is converted into a thin watery fluid. I here show you, from the museum of the hospital, the preparation of a breast which I removed some years ago from a foreign lady. It was carefully dissected by Mr. Coote, who has introduced bristles from the nipple into some lactiferous tubes, dilated to the diameter of a writing quill. In course of time portions of the tube become more or less isolated, and the cavity is gradually distended by secretion into a cyst, from the walls of which may be produced a soft growth, which first filling the cyst, and then, making its way through the containing structures, emerges as a red and bleeding fungus. Upon dividing a breast so degenerated, we observe escaping from the different cysts, fluids differing in consistence and colour,—in some parts thick and glutinous,—in others oily,—in others limpid and watery. The fluid may be either clear and transparent, or of various shades, from a light yellow to a deep brown tint, from admixture of blood.

As contrasted with the extirpation of a breast affected with scirrhus, the operation of removing one of these innocent tumours, which are always loosely connected to the neighbouring structures, is comparatively easy. In the present case, the diseased parts were firmly connected only in one spot, where the areolar tissue was thickened, probably from the weight of the mass. In malignant diseases, the infiltration of morbid deposit always extends beyond the structures first affected. Hence it is often necessary to make the incisions at some distance from the obvious circumference of the tumour, and to include a considerable portion of integument, the removal of which prevents the approximation of the edges of the wound, and involves the necessity of our leaving an open surface of considerable extent—a condition which adds to the patient's danger, especially when the wound is situated over a cavity containing such important organs as those of the chest.

In the present case, the administration of one drachm of chloroform threw the patient into a state of complete insensibility, which lasted during the extirpation of the tumour and a considerable part of the time occupied in tying the arteries. It was followed by temporary faintness, cold sweat, and sickness; all of which symptoms passed away in a short time, leaving the patient as comfortable as was to be expected after having gone through so considerable an operation. In employing this powerful agent, which not only prevents the physical suffering inseparable from the use of the knife, but by obviating the great shock to the nervous system of a severe operation, leaves the patient in a much more favourable condition for recovery, we should ever bear in mind that there have been some well-authenticated fatal cases, and that on these occasions death has ensued quickly, and where the quantity of chloroform used has been small. It is therefore advisable to administer it slowly, and to allow its dilution by the admission of atmospheric air. It is indispensably necessary to watch the pulse, and to remove the apparatus if the circulation should begin to fail. It is, however, an important fact, that neither in this hospital nor in my own private practice, where I employ it upon all occasions, has any alarming circumstance hitherto

occurred; and it has only happened in two or three instances that so much faintness has ensued as to give us any temporary apprehension.

Sickness is not always prevented by the precaution of operating when the stomach is empty; for in this case the operation was performed four hours after breakfast, at which the patient had taken merely a cup of coffee and a small slice of toast.

Oct. 24.—Mr. Lawrence reported that the recovery of this patient had been remarkably rapid, without loss of appetite or rest, or any unfavourable symptom whatever. She got up at her usual hour the morning after the operation, to have the bed made. The wound was so nearly healed, and she was so well at the end of a week, that she could have returned to Wales, if she had so wished. The operation had relieved her from an almost intolerable burden, without causing suffering or illness.

I next present for your inspection the breast of a lady, in which the mammary gland has undergone scirrhous degeneration. The patient from whom it was removed is an excitable nervous person, aged 45, a sufferer from rheumatism, in affluent circumstances, and accustomed to have every wish gratified. She is married and the mother of a family, although her last confinement took place some years ago. The disease in the breast was discovered by accident, it having given her no uneasiness until quite lately, when she experienced occasional darting pains extending towards the shoulder. External examination detected partial induration of the gland, extending from the nipple upwards and inwards; the rest of the organ, which was covered by a tolerably thick layer of adipose structure, felt of its natural consistence, and healthy. The patient, having been apprised of the nature of the affection, readily assented to an operation; chloroform was administered so as to produce insensibility, and the whole breast was extirpated in the usual manner.

My object in directing your attention to this case is especially with reference to the question, whether, in partial scirrhus of the mammary gland, we should extirpate the entire breast, or only that portion of it which we feel to be affected; and the specimen now before you is one of many which show that the thickness of the coverings, and more especially of the subcutaneous adipose layer, not uncommonly prevents our detecting, until after the removal of the part, changes of structure, which have gone on to a considerable extent at some distance from the original seat of the disease. You here see around the first mass of scirrhous infiltration, which is about equal in size to a large walnut, four or five hard knots, which, though not detected before the operation, present, upon being cut into, those changes which we know to be characteristic of cancer: they are lobules of the mammary gland, connected to the rest of the organ by lactiferous ducts, enveloped in the same capsule, but not so closely aggregated together as in the centre of the organ. Their usually soft structure is converted into a hard semi-transparent light grey substance, in which we see lines and streaks of an opaque yellow hue, indicating the course of some of the tubules, filled with morbid secretion. Precisely the same change is seen in the indurated mass occupying the centre of the gland; the induration becoming slighter, and the alteration of colour less perceptible, as we trace the diseased part towards its circumference, where it blends with the healthy tissues.

There exist, in my opinion, sufficient grounds to lay it down as a rule, that in all cases of cancerous degeneration of the mammary gland, in which an operation is a proper measure, the entire breast should be extirpated. If a portion only be removed, we run the risk of leaving behind some part, which, though small in size, is either equally diseased, as is illustrated by the specimen before you, or is in a state likely to take on this morbid action, although there may be no cancerous matter absolutely deposited at the time.

In 1847, I was consulted by a lady from whom, a few weeks before I saw her, a portion of the mammary gland had been extirpated for scirrhous disease, by a very careful and well-informed surgeon in France. There is every reason to believe that the operation was performed, as far as it went, in a satisfactory manner; the edges of the wound were brought together, and cicatrisation was nearly complete, when the remaining part of the breast became uneasy. Before five weeks had elapsed, from the date of the operation, the cicatrix became hard and knotty; then the wound re-opened, and the discharge, instead of being purulent, was thin and ichorous. When I saw her there was induration extending along the whole length of the cicatrix; and, towards its inner extremity, there was an irregular ulcerated surface, measuring probably an inch in its long diameter. There was no doubt whatever but that cancerous disease was recommencing in this lady's breast, and that the only measure left her was the removal of all that remained, including the cicatrix. This was done; the wound healed without any unfavourable symptom, and she now, at the expiration of nearly four years, is in the enjoyment of perfect health.

A careful examination, instituted at the time, showed that the dense fibrous structure of the cicatrix was separated and thickened by the infiltration of nucleated cells, which were found in greatest number about the ulcerated spot, and were gradually encroaching upon the deeper structures.

LECTURE
INTRODUCTORY TO THE LONDON COURSE OF MEDICAL STUDY.

MIDDLESEX HOSPITAL.

By S. J. GOODFELLOW, M.D., M.R.C.S., D.S.A.

Gentlemen,—To me has been deputed the honour of giving the introductory address on the opening of the winter session at this school. Although fully sensible of the honour conferred upon me by my colleagues in requesting me to give the address on this occasion, yet I must confess, that it was with some regret that I complied with it, from a feeling that I could not give that attention to its preparation which I should have liked, in consequence of a peculiar claim on my time and attention at this period. It was expected, that the learned senior physician of this hospital would have obliged us on this occasion; and it was with very deep regret that the lecturers found that, in consequence of the pressure of his other avocations, he would be unable to accede to their request. His superior learning, his large experience, and his far longer connexion with this school, would have enabled him to give an address much more acceptable to this meeting than one coming from so humble an individual as myself, whose connexion with the school has been so recent. I have, however, one great encouragement in the sympathy felt, I hope, by all present in the success of this school, and especially by the body of governors of this hospital, and that whatever may be my failings on this occasion, their interest in the school will continue unabated. The history of this school during the past few years presents a very varied character. From causes, which happily no longer exist, its prosperity was for some time declining, but within the last two or three years it has again risen into vigour, and has been successful to an extent which its most sanguine well-wishers could scarcely have ventured to anticipate. The history of the past will be, I hope, as it ever ought to be in every institution, our safest guide for the future; and so long as we avoid the shoals and quicksands which have been so disastrous in former times, and keep steadily in the smooth and even stream of unanimity, honour, and industry, there can be no one reason why the Middlesex Hospital School should be second to any in this metropolis. We have a noble hospital, the zealous support of the governors, and our dissecting rooms, museums, and other appliances, are equal to those of most other medical schools; and, with a strict and unswerving determination on the part of all concerned in its management to keep up a high tone of moral and gentlemanly feeling in our pupils, and to encourage industry in their studies, what should prevent the Middlesex Hospital School from ranking among the first in London? There is, however, one ingredient wanting which has successfully been introduced into a few other schools, and which has been found to have answered the high purpose which it was intended to fulfil. I need scarcely say, that I allude to the collegiate principle, like that which has been for so long a period in operation in our time-honoured universities. And although it might, perhaps, be considered premature at once to form such an establishment, yet it is considered by those who have the interests of the school—

and I may add, those of medical pupils also—most deeply at heart, that its introduction, at no very distant period, should be kept steadily and constantly in view. No one who has reflected much on the mode in which medical education has hitherto been conducted in this country, and on the manner in which pupils have been thrown on their own resources on arriving in London, and in prosecuting their studies, can have failed to have perceived a very great and serious defect. Lectures have too often been the only means of communication between teacher and pupil, and the amount of information possessed by the latter, or the progress in his studies, whether little or much, has, in the majority of cases, been wholly unknown to the lecturer. This, it must be evident to every one, is not the relation which ought to exist between teacher and pupil. The lecturer should be a tutor, seeing not only that the pupil is regular in his attendance on the lectures, but that he reads the subjects at home; and his knowledge of them should be tested by frequent examinations. Again, the want of suitable apartments for quiet study is deeply felt by students, and to those who mix much with them this is plainly evident. It is often seen, that a young man who has been most carefully and anxiously brought up by his parents, is sent to London from a comfortable home, in which all the duties of a family have been strictly and regularly observed. The school to which he is to enter may or may not have been selected for him; if it has not, his difficulties are still more increased. He comes, perhaps, without a single introduction, and the first thing, after selecting his school, is to look for a lodging. In this selection he is entirely without a guide. Generally, such lodgings as fall within the means of a medical pupil's resources are not at all adapted for study, and, for the most part, kept by a class of persons into whose house his parents would but little have liked him to enter,—a class quite incapable of appreciating the conditions necessary for quiet and successful study, as well as the wants and exigencies of a gentleman. In effect, their houses are, for the most part, noisy and comfortless, and, in many respects, are calculated rather to divert a pupil from his studies, than to encourage him to pursue them. The consequence is, what lecturers often find to be the case, that, instead of reading and reflecting at their homes on the subjects daily brought before them, too many trust entirely to the impression made in the lecture-room, and the whole subject is left out of mind until another lecture on the same subject again brings it before them. The lodgings in which they are located are so unlike the homes that they have lately left, and have always been accustomed to, that they are glad to be absent from them, and too often are lured from their studies by temptations to amusements which are profitable neither in an intellectual nor in a moral point of view.

Such is an unexaggerated statement of a case which is too often witnessed, and which the collegiate principle is intended to remedy,—the great object being to provide comfortable and quiet apartments for the pupils, under the control of the weekly board, or some one appointed by it; to provide commons at a reasonable rate, and thereby prevent the necessity of their going to chop-houses and other similar places for their meals; and, moreover, and above all, to secure, on the tutorial system, constant advice and assistance in the prosecution of their studies. These are the objects sought to be accomplished by the collegiate system; and to any one even but little acquainted with the mode of living and the habits of a good many medical pupils—there are, I am glad to say, many, very many, honourable exceptions around me,—to any one, I repeat, who has witnessed their habits generally, it must be apparent that some sacrifices and trouble might well be incurred for the attainment of such desirable results. The governors of this hospital have already done a great deal to remedy this state of things. They insist on a regular attendance on lectures, and have taken means for securing it; and they have also made arrangements, which have been now in operation for some time, for those pupils who like it, to take their meals with the officers of the hospital. These are very important steps in the right direction, and are only two among many acts in which the governors of this hospital have evinced their lively interest in the school and in the comfort and welfare of the pupils. It is not the interest and welfare of medical pupils that are alone to be promoted by the collegiate system, it is not the medical profession that is to be advanced, but the welfare and safety of the public generally are deeply and vitally concerned in everything which is calculated to exert an influence on the character and education of medical men, and, of that which promotes their honour and intelligence; and as the collegiate system will be a powerful engine in securing and advancing these, it would, I think, be impossible to over-estimate its importance. The public is but little aware how much it is dependent on the honourable conduct of members of the medical profession, or of the great temptation which it holds out for departing from an upright and honourable course in the practice of the profession. The rage which at this time more than ordinarily prevails among the public for the removal of disease by so-called specifics, or by exclusive and partial modes of practice, holds out a great temptation to medical men to give up the honourable and honest practice of their profession for the more money-getting but dishonest course of quackery and deception. It is observed with deep regret that this temptation is too strong for some, whose early moral training has been neglected, or whose moral and religious feelings are too feeble to resist it. Were the public better informed of the legitimate practice of medicine, of the object which is sought to be fulfilled in the treatment of disease by right-minded and well-educated members of the profession, very few would be the dupes and victims of those designing and dishonest persons who set themselves up as mesmerists, hydropathists, and homœopathists, who would appear to prosper by deceiving the public as to what constitutes the regular practice of the profession, and, under pretence of an exclusive system, still continue to treat disease on the very plan which they profess to condemn. If it were known to the public, that the great and only object sought to be secured by the medical corporate bodies, in the curricula of study which they have framed, was to insure, on the part of those applying for their licence, an accurate knowledge of disease in all its phases, and the application of *all* remedial agents, both external and internal, which science and experience have sanctioned, and not to recommend or force upon medical men any one partial or exclusive plan of treatment, the public would soon cease to be deceived by these dishonest persons, and exhibit less credulity in their misrepresentations. It is a mistake to suppose that medical men are interested in one plan of treating disease more than another; they are not so. Their only object is, first, accurately to determine the character of the morbid action set up, and, this being done, with all the aid of direct and collateral means of research, then to apply every remedy which science and experience point out. They have no interest in excluding *any plan of treatment* which is based on scientific and well-defined principles, and will bear the test of experience; but, as members of the commonwealth, *they are* interested in protecting their fellow-countrymen from the injuries to which they are exposed by the misrepresentations and malpractices of unprincipled adventurers.

It appears to me that our profession is in a wrong position with regard to the public intellectually, socially, and politically. The public generally is unacquainted with the nature and extent of medical education, and with the present state of medical science; it regards medical men too often as actuated by selfish interests, and not as friends who have, as a body, done more for the cause of humanity than any other class of men; and, in a political point of view, they are excluded from honours and emoluments to which the other learned professions have free access. It was only on the last northern circuit that a barrister, a Queen's serjeant, in open court, spoke of medicine as a science with a recklessness and contempt, which show that he must either have been utterly and blindly ignorant of what he spoke, or (what is more likely, as he was himself educated for the profession in his early life) guilty of a moral delinquency of a very grave character. Upon occasions like the present, it is very difficult to fix upon a subject which presents any features of novelty which has not in fact been dilated upon with a tedious repetition. I do not know that the history of the progress of physiology and medicine during any particular period has ever formed one of these subjects; but, whether it has or not, believing that in a mixed assemblage like the present, it might be the means of placing the scientific nature of medical studies in a prominent light, I have decided upon directing your attention on this occasion to the principal discoveries which have been made in physiology during the past quarter of a century, and their influence on the principles and practice of medicine and surgery. I hope to make it clear, that the science of medicine is as exact, and the phenomena of the vital

actions in health and in disease are as well understood as are those of any of what are called the natural sciences.

It is an undoubted fact, that during the last quarter of a century the progress of medical science, used in its most extended signification, has been greater than at any other similar antecedent period; and yet, notwithstanding that the last few years have teemed with discoveries of the greatest value, not one of them has attracted much attention from the public. An eminent writer has stated, that this perhaps is not so remarkable, considering the apathy that prevails among the general public in all that relates to the medical profession; and most unhappy is it for the highest interests of society that it is so;—that the great discoveries, both in physiology and anatomy, which are crowded within the last quarter of a century, have attracted so little notice among the educated and learned classes. And yet, it would not be difficult to show, that, within the space of these few short years, the whole aspect of organic science has been changed; that discoveries, in no degree second in intrinsic importance to that of the circulation, have been made, casting a flood of light on the most universal phenomena of animal bodies; that generalizations, relating both to properties and laws, having a value and signification in the organic creation so vast that they can only be properly compared with those of gravitation or chemical affinity in the domain of common matter, have been firmly established; that whereas, till within a period so brief that it is as nothing in the ordinary calculations of human progress, there was scarcely a prime question, whether relating to structure or formation, which was not either unknown or involved in doubt, there are not a few on which a mass of knowledge is now possessed, which, even by the most sanguine, must have been hoped for rather as the fruits of centuries than of years. It may reasonably be asked to what this rapid progress is due. I believe it may be mainly ascribed to the more active and more scientific cultivation of general or minute anatomy.

The more substantial foundation on which scientific medicine now rests, and the sounder principles of the practice of medicine now in vogue, are eminently due to the important discoveries which have been made in organic science within the past twenty years. I do not think it an exaggeration to say, that, previously to this epoch, all relating to minute anatomy and physiology was involved in doubt and obscurity, and that the practice of medicine partook of this doubtful and uncertain character. It is quite true that there have appeared, from time to time, great men, who have been so far in advance of the age in which they lived, that their views were imperfectly comprehended, and their labours and writings left in neglect. Among these may be mentioned the ever-honoured name of Hunter; for, as has been truly observed, "amidst the innumerable additions which have from all quarters flowed in, there are scarcely any which do not find their place among the great principles enunciated by him; while not a few of the most profound discoveries, equally with the most minute, are but the repetitions of great truths, which he had long since proclaimed in a language now become clear and expressive."—(Grainger.) The great discoveries which have been made by modern investigation maybe traced, to a very great extent, to the improvements effected in the construction of optical instruments, and to the extensive use of the microscope in the study of minute anatomy; and, in saying this, I would not be considered as doing an injustice to another most valuable means which has been resorted to in the same kind of investigations: I allude to organic chemistry. These two most potent means have been instrumental in effecting a complete revolution in physiological science; and this is so generally known and felt in the present day, that there is no probability of their ever being withdrawn from anatomical and physiological investigations. Indeed, a navigator would as soon be found to traverse the ocean without a chart and compass, as the anatomist and physiologist to thread his way through the intricacies of organisation without the aid of the microscope and chemical analysis. It is necessary for them to go together, for where chemistry fails there the microscope has been found effectual, as in detecting and tracing the wonderful phenomena of generation and development; and, where the microscope has been found inefficient, then we have been assisted out of the difficulty by chemistry, as in the explanation of the changes effected on the blood by respiration; and in many other cases these great auxiliaries are found going hand in hand together, mutually proving and confirming the truths revealed by each. The examples of this are so numerous and patent as to render it unnecessary for me to point them out in an assemblage like the present.

In taking a review of the progress of physiological and medical science during the last quarter of a century, the first in point of time, if not in importance, which will come under our consideration, is that which has taken place in our knowledge of the nervous system. Our knowledge of this system appears to have been altogether built up during this period; indeed, it may truly be said, that every fact of importance connected with it has been brought to light, and that all we know of this system has originated and been discovered within the past twenty-five or thirty years. For these great discoveries, which have formed a new era in medical diagnosis, and the importance of which to the physician and surgeon can scarcely be overrated, we are indebted principally to the labours and genius, in our own country, (among many others who have furnished many valuable contributions,) of a Bell, a Hall, and a Reid; and abroad, to those of Müller, Flourens, Valentin, and others. But the first, and pre-eminent, is Bell, whose genius shed a lustre, not only on this school (which will ever be honoured in having had such a man attached to it) but on the country which gave him birth. He it was who, without any exaggeration, may be said to have extricated our knowledge of this system from a mass of confusion, and raised it to a clear and intelligible position. Before the brilliant idea which he conceived of the nervous system, everything was dark and undefined. Mr. Shaw, in his narrative of Sir C. Bell's discoveries, states that, before his time, "It was taken for granted, that all parts of this system had certain general properties belonging to them in common, so that all were considered alike in function. The brain, including the spinal marrow, was looked upon as a common store, from which certain powers, such as that of motion, were issued to the body, and into which others, such as sensation, were received, the nerves being regarded as the conductors; and, in conformity with that view, it was further supposed, that any part of the brain, or any single nerve, had equal power with all the others in bestowing the numerous properties commonly assigned to the nervous system." For the sake of illustration, we may take the nerves which arise from the spinal marrow. "It was conceived that these nerves were all simple in structure, and that, nevertheless, they had the double property of conveying the power of motion and of sensation to the limbs; and the spinal marrow, being considered as a prolongation of the brain, was believed to transmit the powers of motion and of sensation along the nerves, by all its parts promiscuously." Such were the confused notions that prevailed when Sir C. Bell conceived the happy idea, which he afterwards proved to demonstration, that nerves were endowed with distinct and appropriate functions, corresponding with the parts of the brain and spinal marrow with which they are connected at their roots; and that when a nerve which appears simple is found to bestow more than one endowment, it is a sign that that nerve has more than one origin from the brain, and consists in reality of several nerves joined together. But it was not alone upon the origin and functions of compound nerves that he threw a light, but also on the nerves of special sense,—as the optic, auditory, olfactory, &c. "The nerves of special sense," says Mr. Shaw, "were formerly conceived to be so closely allied to each other, that their functions were regarded rather as modifications of one common property than as distinct and specific. Thus, it was supposed that the nerve of one organ of sense could be substituted for the nerve of another, if transposed to that organ. For example, it was believed that the optic nerve, on which vision depends, could bestow common sensation, or pain, like a nerve of the skin, and that a common sensory nerve might convey the special sensation of light." Sir C. Bell proved the error of this, and found that the nerves of special sense could only convey the peculiar sensation of light, sound, or smell, as respectively the case might be. Thus did this great man conceive, and that by a process of reasoning of the highest order, confirmed by his observation of the progressive development of the brain, from the lowest creatures upwards in the animal scale, this fundamental principle, which, to use the words of Mr. Shaw, "by adopting as his guide, he was rewarded, not only by making discoveries for their extent and value to medical science only to be compared with those introduced by Harvey by his discovery of the circulation; but he was

rewarded also by communicating a fresh impulse to the labours of other physiologists in the same field." He saw, with his mental eye, what has been proved to demonstration by the bodily organ, when aided by that second optical sense—the microscope—that the nerve which we trace in the body is made up of a large number of parts, each having its distinct origin in the nervous centre, and taking a distinct and separate course throughout its extent. In this respect, again, he may be compared to the illustrious Harvey; for, as it has been well observed by an able physiologist, who has himself enriched anatomical and physiological science by his researches, "neither Harvey nor Bell saw with the bodily organ the great cardinal facts they so confidently proclaimed,—the junction, that is to say, in the one case, of the arteries and the veins by means of the capillary vessels—that subtle link in the circle of the blood; and, in the other, the individuality of the primary nervous tubules." Some of the practical results of Sir C. Bell's discovery of the distinct function of nerves, extended and amplified as it has been by the labours of Arnold, Scarpa, Bischoff, Valentin, and Dr. J. Reid, may best be stated in Sir C. Bell's own words. Alluding to the discovery of the distinct and separate functions of the facial and the fifth pair of nerves, he says, "This discovery must prove useful both to the surgeon and physician. To the surgeon it must be useful in performing operations on the face, as well as in observing the symptoms of disease. If we have to plan an incision on the face, we must take especial care to avoid cutting the branches of the seventh nerve; for if it be divided, there will be a paralysis of the muscles supplied by that nerve. Whereas, if we divide the fifth, though there may be more pain during the operation, and a defect of sensibility following it, no unseemly distortion will be produced. To produce paralysis, as a consequence of an operation which was meant to remove a deformity, is an unfortunate mistake; but even worse consequences may result from an ignorance of the distinct nature of these nerves; if, trusting to the eyelids being supplied by the branches of the fifth nerve, a surgeon, on opening an abscess, or cutting out a tumour, should cut the division of the seventh, which goes to the eyelids, the consequences would be unfortunate. The eyelids thenceforward would stand apart, the eye would be permanently uncovered and inflamed, and from this inflammation the cornea become opaque, and the vision of the eye injured or altogether lost. By a knowledge of the distinct functions of the nerves of the face, combined with a knowledge of their roots or origins in the brain, we become better able to comprehend symptoms when they are consequent on disease in the bones, or in the base of the brain, or when they result from injury to the skull or brain, as in the case of gun-shot wounds."

To the physician, the facts ascertained in this paper must also be important. He will be better able to distinguish between that paralysis which proceeds from the brain, and that partial affection of the muscles of the face, when, from a less alarming cause, they have lost the controlling influence of the respiratory nerve. How often has an inflamed gland affecting a branch of the *portio dura* been mistaken for a disease in the brain itself, because it was not known that, although the fifth nerve was free, the pressure on the seventh nerve was sufficient to paralyse the muscles of the side of the face. That the disease of the bone at one time affects the fifth nerve, producing excessive pain of the face *without* paralysis, and that it, at another time, affects the seventh nerve, inducing paralysis *without* pain, are now phenomena accounted for. Again, it frequently occurs, that young people have what is vulgarly called a blight from exposure to cold, by which is meant a slight palsy of the muscles of one side of the face. Before these observations of Sir C. Bell, it would have been said, that paralysis could *not* be so produced, *because the parts are plentifully* supplied by the branches of the fifth nerve; that the disease must be in the brain. Cases of this kind are constantly occurring, which give a great value to Sir C. Bell's discoveries; and many other important results might be adduced. I have purposely related Sir C. Bell's own description of the results of one of his very important discoveries, because to my medical hearers the statements contained in this description are now so commonly observed and generally understood that it must appear surprising that, in so brief a period from this time, they were altogether new; and some medical men, indeed, there were who could not, or would not, believe them.

[To be concluded next week.]

ORIGINAL COMMUNICATIONS.

CASES OF PLACENTA PRÆVIA.

By CHARLES WALLER, M.D.,
Obstetric Physician to St. Thomas's Hospital.

Since my last communication, published in the *Medical Times*, August 10, two additional cases of placenta prævia have occurred in my practice, the results of which I now transmit for insertion in your journal.

Case 41.—This case was under the superintendence of Mr. Middleton, of the City Dispensary, who has kindly furnished me with its early history. Mrs. A., a female of extremely delicate and spare habit, was the mother of three children. Her labours had been natural, and her restoration afterwards to her ordinary health and strength tolerably speedy. At the beginning of this her fourth pregnancy, she suffered greatly from an immense distension of the crural and femoral veins; besides this, nothing was complained of until the 14th June, when, according to the usual mode of calculation, she had just completed the seventh month. At this period, a sudden gush of blood took place, unattended with any pain. Mr. Middleton was sent for, the patient imagining that her labour was beginning. This, however, was not the case, and by rest, the administration of tinct. opii, &c., the hæmorrhage, which had been trifling after the first gush, was perfectly restrained; no repetition of the bleeding occurred until the 7th of August, when there was another gush; the quantity lost was smaller than the preceding one, (August 14th,) and she did not send for her medical attendant. On the 10th of August, slight pains supervened with free hæmorrhage. Mr. Middleton, suspecting the nature of the case, made a very careful examination; the os uteri was high up, and so little dilatable that he found it impossible to pass the finger through it without using a degree of force which, in his opinion, would not be justifiable. He therefore enjoined absolute rest in the recumbent position, and prescribed tinct. opii 3ss., which soothed the patient, and arrested the bleeding throughout the day. Next morning, August 11th, slight labour pains came on, with but little flooding; the discharge increased in the afternoon, and then secale was administered, and the hæmorrhage nearly ceased. On the following day, Mr. Middleton was summoned again to his patient, and found her very faint from a large and sudden loss of blood. On examination, the os was so far dilated as to admit the introduction of two fingers; the remaining portion much softer and more yielding than on the previous examination. This occurred about three o'clock, soon after which I was sent for, but, being absent from home, did not arrive at her house until half-past five. The hæmorrhage had been trifling since three o'clock, but the aspect of the patient's countenance showed that the constitutional effect was great. When I entered the room she was vomiting, but this did not continue. On examination, I found the os uteri dilated to the size of a crown-piece, and dilatable enough to admit my hand with tolerable facility; the placenta was adhering generally. I separated this, and proceeded to perform the operation of version: a little more difficulty than usual was experienced in consequence of the feet being high up in the uterus. The child was enlarged from incipient putrefaction, and, from the undilated condition of the os, some little effort was required to bring the head through the external parts. During the operation there was very little if any hæmorrhage; but the exhaustion rapidly increased. The pulse, which had been by no means unfavourable, considering her losses of blood, could scarcely be felt; a temporary rally only having been effected by the use of the ordinary stimuli, combined with nourishment, (brandy and the yolk of an egg.) Our unfortunate patient repeatedly stated that she felt no faintness, but felt excruciating agony in the back, extending "round the waist."

This pain appeared to be seated in the locality of the diaphragm; the breathing was almost entirely thoracic. In addition to nourishment, large doses of opium and ammonia were given; sinapisms were also applied, but without any alleviation of suffering.

The heart's action was exceedingly feeble; the sinking increased until eight o'clock, when death closed this melancholy scene.

I was very anxious for a *post-mortem* examination in this case, suspecting, from the severe abdominal pain and the

horacic breathing, that some laceration might have taken place. Permission to inspect the body was readily obtained; but nothing was discovered which could account for the extreme pain. The appearance of the viscera generally was pale and bloodless, with the exception of a small portion of the peritoneal covering of the lower portion of the right side of the uterus; here there was a vivid deep red patch with a corresponding red appearance of the same size on the peritoneal lining of the pelvis, which contrasted strangely with the pallid and blanched hue of the neighbouring parts. The capacity of the thorax was somewhat diminished, in consequence of the liver, which was large, having been pushed up by the ascending uterus during the latter periods of pregnancy; the lungs generally crepitant; a few ounces (about three or four, as nearly as we could calculate, for we did not measure it) of bloody serum were effused into the thoracic, and about an ounce in the pericardial cavity.

Case 41.—This case had a very different termination; the female is progressing rapidly towards complete recovery.

S. L. was a patient of St. Thomas's Lying-in Charity, and was attended by my young friend and pupil, Mr. Timothy, who is one of the most active members of my obstetric class. The following particulars have been forwarded to me by him, as I did not myself see the patient until some days after her delivery.

This female, twenty-two years of age, was confined in January, 1850, with her fifth child; the infant lived only a fortnight, and the mother again became pregnant in the beginning of March. In the early part of June there was a sudden discharge of blood, which continued at irregular intervals until the beginning of August, when it ceased, and was succeeded by a copious flow of a watery fluid destitute of colour and smell. On the 12th of September, when her labour set in, the pains were frequent, each one being accompanied with a gush of blood. On examination, the os uteri was found dilated to the size of a crown-piece, and the entire placenta presenting, the bleeding being profuse. Mr. Timothy passed his hand gradually through the os; separated and brought away the placenta, when the flooding immediately ceased. The feet were then grasped, and the delivery completed. There was great re-action for a few days, but no serious symptoms occurred.

Case 42.—In my general report, published in the *Medical Times* some time ago, I omitted a case which happened during my absence from town, where the hæmorrhage was of the most fearful character. My friend, Dr. Oldham, very kindly attended for me, and by immediate delivery saved the life of the mother. The child was dead.

Finsbury-square, September, 1850.

POISONING BY THE CYANIDE OF POTASSIUM.

By WILLIAM HINDS, M.D.

The following case of poisoning by the cyanide of potassium, being, as far as I know, the second case which has occurred, (the first having been published last week in the *Medical Times* by Mr. Ross,) may possibly be of some interest, especially with reference to some of the symptoms and *post-mortem* appearances after poisoning by this salt, which do not appear to be yet well made out. Previous to the day on which the poison was taken I had attended the patient for some days, and therefore I give the case entire, as it appears in my case-book.

Thomas Hulme, aged 44, of sanguine temperament and sandy hair, has been subject to severe fits of depression for about twelve years. These were first noticed after a severe fall on the head, and consequent loss of employment. Has been rather studious in his habits, was fond of the French language, and was deeply skilled in pneumismatic lore. He possessed a most valuable collection of medallions. During some years he has been in the habit of drinking a good deal, and has several times had delirium tremens. During his seasons of despondency he has many times talked of destroying himself. He was very reserved in disposition and habits.

A week ago, on September 16, he sent for me, and was bordering on delirium tremens, and had been drinking brandy. In a few days he had almost entirely recovered. I called on the 21st to see him, and found him as well as usual. This was about half-past twelve. He was in some difficulties, and had been out that morning to endeavour to arrange for them, but without success. He was then alone in the house. An hour after I had seen him a message came to me that my patient had been found dead in his bed. When discovered his face was downwards and a handkerchief was tightly bound over his eyes. When turned over upon his back, some vomited matters appeared underneath where his face had been. He was so turned before I arrived. His wife and daughter had been from home, and discovered him on their return. I found him quite dead. His countenance was very pallid, extremely unlike what I had seen it an hour previously, and a little froth issued from his nose. No sign of convulsions was perceived. The hands were open. The pupils were somewhat dilated, not greatly.

On the table, about four yards from the bed, was an eight ounce bottle, one-third full of a very faint yellow and transparent liquid, with a little light-coloured sediment. The bottle was marked, about an inch above the surface of the liquid, all round the inside, as if from a slight deposit, arising probably from some very slight decomposition of the contents, which thus appeared to have been kept some time. Very near the bottle stood a wine glass, with about 10 minims of liquid at the bottom of it. The glass was wetted all over the inner surface, as if it had been full of liquid shortly before. On smelling this glass I thought I could detect the presence of hydrocyanic acid. No smell of hydrocyanic acid could be perceived from the matters which appeared to have been vomited, nor could any be perceived in the slightest degree from the mouth of deceased.

The smell of the liquid in the bottle was pungent and ammoniacal. I brought away both bottle and glass. The liquid in the bottle I subjected to the following analysis. It was highly alkaline.

1. To a small portion of this liquid I added solution of nitrate of silver. A dense white precipitate was produced, which soon became brownish in some parts. To this precipitate I added cold nitric acid. The acid did not dissolve it. To a similar precipitate I then added solution of ammonia, and to another portion solution of potass. The ammonia dissolved it only to a slight extent. The potass entirely dissolved it when a little excess of the liquid was present.

2. To another portion of the suspected liquid I added solution of potass, and then a few drops of a solution of sulphate of iron. A brownish precipitate was produced. On the addition of a little diluted hydrochloric acid, a deep blue precipitate (prussian blue), insoluble in dilute acids, was produced. Another portion of the precipitate obtained by the nitrate of silver was carefully dried and ignited in a reduction tube. The gas given off burned with a rose-red flame, thus showing it be cyanogen.

3. Tartaric acid gave an abundant white precipitate.

Post-mortem Examination 42 *Hours after Death.*—The countenance was in its natural state, not at all bloated in appearance. The features were placid. A little froth still issued from the nose. The mouth was nearly closed, as when first seen.

The *stomach* was removed entire, and brought away for after examination. Externally it was of a deep dull red colour.

The *œsophagus* was much congested from about two inches below the larynx to the stomach.

The *duodenum* and upper part of jejunum, for about ten inches, showed distinct traces of inflammatory congestion, confined, for the most part, to the summits of the rugæ.

The *jejunum*, for about three feet, was of a dull red colour, externally and internally, and appeared somewhat congested. A little matter, having the appearance of partially digested food, and of a beery smell, was present.

The *epiglottis* was partially reddened on its under surface and right margin. The mucous membrane of the larynx was in its natural state.

The *brain* was rather pale in colour throughout. A few very small patches of lymphatic deposit existed here and there where the pia mater appeared to be a little thickened by them. The grey matter of the convolutions presented no perceptible softening. A little serum was found in the lateral ventricles, and some effusion, to the extent of about six drachms, existed at the base of the brain.

The *lungs* were generally infiltrated with serum, and the left, at its posterior part, was much congested. At the upper and anterior part of the left lung was an indurated portion, which, when cut into, was darker than the surrounding part. Some scattered tubercles were found in this lung, several of which were in a state of softening. Nu-

merous and extensive old adhesions of the pleuræ existed. There was some effusion into the left pleural cavity.

The *heart* was very nearly empty in all its cavities, and rather flabby. A small quantity of blood found in the right ventricle was very frothy.

One striking condition observed was, that throughout the whole body there appeared very little blood; it was everywhere fluid.

Appearances of the Stomach, and Analysis of its Contents.—When cut open, this organ was found to contain about four ounces of a fluid which gave off very distinctly the odour of prussic acid. A good deal of slightly digested food was present, of a reddish-brown colour, with pieces of unchewed meat. The mucous membrane was highly inflamed. With the exception of that portion near the cardiac extremity, the membrane exhibited an intense and vivid red colour. A portion of its semifluid contents being subjected to analysis, yielded the following results. It was distinctly alkaline. A small quantity of diluted sulphuric acid was added, and the following tests applied:—

1. I moistened the inside of a watch-glass with some spots of nitrate of silver, and inverted it over a wide-mouthed bottle containing the suspected fluid. In a few seconds the spots became of a dead white colour. The white spots were nearly dissolved in cold, and readily in boiling nitric acid.

2. In the same manner I moistened the inside of a watch-glass with some spots of solution of potass, and inverted it over the mouth of the bottle as before. In a few seconds I added to the spots a little solution of sulphate of iron, and then a trace of sulphuric acid, when prussian blue was instantly produced. The presence in the stomach of a cyanide was thus made perfectly clear, and, from the fluid being alkaline, there can be no doubt that the poison had formed a portion of the contents of the bottle, which was shown clearly to have contained a solution of cyanide of potassium.

I repeated the above experiment several times with the same results, though the last trial was not so successful—in consequence, no doubt, of the decrease in the quantity of the vapour of the cyanide.

With reference to the quantity of the cyanide which had been taken, and which had destroyed life in less than an hour, and, considering all circumstances, most probably in half an hour at the most, there is some uncertainty. From the appearance of the wine-glass upon the table, wetted on its whole inner surface, and also the mark round the inside of the bottle where the liquid had reached, most probably about an ounce and a half of this solution had been swallowed.

To enable me to form an estimate of the strength of this solution of cyanide of potassium, I precipitated, by excess of nitrate of silver, the whole of the salt contained in two drachms of the liquid. Of this precipitate, when dried on a previously-weighed filter, I obtained exactly twenty-four grains of cyanide of silver. By reference to the atomic weights and simple proportion of these salts, these twenty-four grains will represent, as nearly as need be, eleven and a half grains of cyanide of potassium. So that an ounce and a half of the solution would contain sixty-nine grains of the poisonous salt. Every 100 parts of cyanide of silver will be found to represent, in whole numbers, 48 parts of cyanide of potassium.

There is one pathological feature in this case to which it may be well briefly to advert. I perceive, by the remarks of Mr. Ross, that he attributes the inflammatory lesion of the mucous membrane of the stomach, after poisoning with the cyanide, to the action of ammonia. With respect to the correctness of this inference, I think there is at least some doubt.

Though ammonia was distinctly recognised in the solution of which my patient was believed to have taken a part, I believe it to have been there merely as the result of some amount of decomposition of the salt; and, if so, it is extremely unlikely to have been in sufficient quantity for the production of the effects upon the lining membrane of the stomach which were present in both the cases.

This question, however, will doubtless be easily determined hereafter; for the general use of the salt in certain departments of the arts, and the knowledge of its deleterious properties will, it is to be feared, bring it into more frequent use as an instrument of suicide. The only recorded fact which I have yet met with bearing on the question of its effects on the mucous membranes is, that, when applied to the tongue of a dog, a few grains of the salt produced marks of inflammation.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

FRACTURES OF THE STERNUM.

FRACTURES of the sternum are not common: the bone, firmly connected to the elastic cartilages of the ribs, yields to the application of any violence, and consequently bears with impunity blows which would break bones in other situations. A noted performer in gymnastics was in the habit of throwing up before an audience a twelve-pound cannon-ball, which he caught, as it fell, upon the front of the chest. Others have supported, lying upon the back, a heavy anvil, which they have allowed persons to strike with a hammer. But as Boyer remarks, "since the cavity of the chest is accurately filled by its contents, alterations in its size or form cannot happen in a considerable or sudden manner without a risk of the thoracic viscera being contused and even ruptured. In some cases blood is effused into the anterior mediastinum; in others inflammation and purulent infiltration of the areolar membrane supervenes. Injury to the lungs and emphysema is another complication. The heart may be displaced, or even ruptured."

Hyrtl was present at the *post-mortem* examination of a young man, who, having been squeezed by a wagon against a stone-post, suddenly died. The heart was ruptured in three places (both auricles, and the right ventricle near its apex;) but both sternum and ribs were uninjured. When a person is prepared to receive any blow upon the chest, as is the case with prize-fighters and others, the surrounding muscles contribute to protect the parts from injury.

It is usually stated, that a fracture of the sternum is rendered obvious by the inequalities perceptible, when the surface of the bone is examined by the fingers; by a depression or elevation of the broken pieces, a crepitus and an unusual moveableness of the parts in respiration. The breathing is difficult, and mostly accompanied by cough, spitting of blood, palpitations, and inability to lie on the back. I wish to call attention to a form of fracture of the sternum, which I believe to be more common than is supposed; in which there is no inequality or perceptible irregularity of the bone; no crepitus upon examination; no particular cough or bloody expectoration; in which the patient, having received a severe blow, complains of intense pain in the sternum and front of the chest, when moving about and sitting up; and, preferring the recumbent posture, is generally found lying upon his back for ease; that is to say, when he happens to fall under the care of one who permits him to select that position which he prefers. A lunatic who, though partially paralysed, had been long subject to violent fits of passion, having attacked some members of the family among whom he was residing, was forcibly seized by his keepers and removed to Bethlem Hospital. He was thin and emaciated, and apparently quite powerless. During the brief time that he remained alive in the institution, he lay quiet, either upon his back or side, breathing feebly but regularly, and making no complaint when left to himself, but furiously resisting personal examination. He died, having been admitted in a hopeless condition, April 11, 1849.

Examination of the Body by Mr. Lawrence.—The first bone of the sternum was loosened from the lower segment; the latter was partially fractured about its middle; the front aspect presenting a smooth, even, and perfectly continuous surface; the internal presenting a transverse fracture, which had made a fissure of the bone. Upon the sternum and the cartilages of the ribs being removed, there was exposed, in the anterior mediastinum, a thick mass of areolar tissue, infiltrated by pus, and extending over the front surfaces of the pericardium and the pleuræ. Inflammation had not extended either to the heart or the lungs, but the pericardial sac contained a larger amount of fluid than natural. There was no morbid appearance in the skull cap, but the dura

mater adhered very firmly to the bone; there was a considerable effusion of serum under the arachnoid membrane, which was slightly opaque towards the posterior part of the brain; the cerebral substance was firm, but the bloodvessels were fuller than natural. The lateral ventricles contained about three ounces of fluid; there was an adhesion between the contiguous surfaces of the septum lucidum, and the wall of the left lateral ventricle. There were several small purulent infiltrations in the cortical substance of both kidneys. I can recal two other cases, in all essential particulars precisely similar to that here related. Some sudden violence, applied to the front of the sternum, and pressing it inwards, caused a transverse fracture upon its thoracic aspect, extending partially through the bone. There being no irregularity of surface, the nature of the injury was unsuspected; inflammation of the areolar tissue of the anterior mediastinum supervened, and the patient died labouring under undefined symptoms about the chest. The attention of Mr. Stanley was directed to this subject in the month of August of the present year. A labouring man, employed upon the exterior of a house, fell from a scaffolding, and came to the ground with his chest across a moderate-sized beam. He was lifted from the ground and supported to the hospital, where he was received pale and faint, scarcely able to sit upright, and complaining of the most excruciating pain, upon pressure being made on the sternum. The integuments were bruised but not otherwise injured. Upon being questioned as to his feelings, he stated, that when lying down he was tolerably easy, but upon attempting to move he felt the most severe pain just in the situation where the chest had struck the piece of wood. Although no irregularity of surface could be detected, Mr. Stanley considered it probable, from the well-marked, deep seated pain in one particular spot, that the man had received an injury similar to that above described. Upon being put into bed he turned upon his back as being the easiest posture. No unfavourable symptom supervened, but a month elapsed before he was able to quit the hospital. It is obvious that some doubt as to the character of the injury must always exist in those cases which terminate favourably; yet, although the additional evidence which is required is rarely attainable, the possibility of a partial fracture of the sternum should never be forgotten.

Union of the first and second bones of the sternum is effected by a fibrous medium; partial fracture of the second piece we should expect to unite by bone. Hyrtl states that he has seen a fracture of the sternum in its upper third united by a flat layer of callus (durch platten callus). Much of course depends upon the seat of the fracture, and the amount of separation of the fragments. In the museum of the hospital there is a preparation which exhibits the repair of a dislocation between the first and second bones, which overlap considerably, the first projecting in front of the second. The contiguous periosteal surfaces are firmly united. There is also a deposit of osseous substance upon the anterior surface of the second bone below the projecting end of the first. The dislocation occurred five months before death in an elderly man who fell from a tree. He died from cancer of the œsophagus. H. C.

THE SEAMEN'S HOSPITAL.

By H. T. A. ROOKE, M.D.,
Resident Surgeon.

COMPOUND COMMINUTED FRACTURE OF THE RIGHT LEG.—EXFOLIATION OF PART OF THE LOWER FRAGMENT.—RECOVERY.

Case 1.—James Gray, aged 39, boatswain of the ship Gloriana, was admitted September 9, 1849, with a compound fracture of the right leg. The accident occurred through the chain of the anchor, whilst being let go, becoming twisted round his leg. On admission, it was ascertained that the limb was broken at the junction of the middle and lower thirds. The fracture was oblique and comminuted, the lower fragment sharp, and protruding considerably through a lacerated wound in the integuments of three or four inches in length.

With some little trouble the fracture was reduced, and the leg placed upon M'Intyre's splint. The wound was dressed with water dressing.

Sept. 10.—He has passed a moderately comfortable night; the leg is free from pain, but the lower fragment is somewhat prominent; the integuments over it seem much injured, and disposed to slough.

11th.—This morning, on probing the wound, some loose pieces of bone were discovered lying between the ends of the fracture. These were removed after enlarging the opening. The leg not being comfortable in its present position, the iron splint was removed, and two side-splints of gutta percha substituted in its place.

18th.—Since the last report, the patient has been progressing favourably; the wound is dressed daily; there has been some sloughing of the integuments, from the pressure of the sharp, prominent point of the lower fragment, but now healthy granulations are springing up. To have a single splint of gutta percha moulded to the back of the leg, with two wooden side-splints to steady it.

The leg was kept in this position for a fortnight, at which time the swelling had entirely disappeared, and the limb shrunk considerably below its natural size. The patient now complained of great pain, commencing at the instep and extending to the great toe. This could only be alleviated by replacing the limb on Liston's splint, and swinging it.

Nov. 18.—The leg being quite easy in this posture, it has been continued up to the present time. This morning, a portion of the lower fragment, being loose, was removed; union is rapidly taking place.

Nov. 22.—A small piece of bone came away to-day; the wound presents healthy granulations; a considerable amount of union has taken place.

29th.—The leg was removed to-day from the splint; union is nearly completed; the wound has healed, but a small sinus is left, which discharges on making pressure on the calf. The leg to be laid upon a pillow, and a compress applied over the course of the sinus.

Dec. 2.—Discharge diminishing; the sinus seems disposed to close.

From this date he continued to improve; and on the 8th of January he was enabled to leave the hospital. The broken ends of the bone had then firmly united; he could walk with the assistance of crutches; the leg is about half an inch shorter than its fellow.

Oct. 24, 1850.—He called to-day to show his leg. He is quite well, and looks ruddy in the face. He walks a little lame, owing to the difference in the length of his legs; in other respects he has a perfect use of the injured limb, and is on the point of starting on a voyage to Madras.

ABSCESS OF THE LEFT TESTIS—OPERATION FOR THE REMOVAL OF THE GLAND—PERITONITIS EIGHT DAYS AFTERWARDS—DEATH—*POST-MORTEM* APPEARANCES.

Case 2.—Moses Parry, aged 25, admitted, January 7th, with a small sinus discharging healthy pus, in the centre of the left side of the scrotum. The cord was slightly enlarged; the body of the testis, so far as it can be felt distinctly from the surrounding thickened integuments, is even, indolent, and of a natural consistence. He is of a delicate strumous aspect, but presents no evident signs of having suffered from scrofulous disease in any part; there is the large cicatrix of a bubo in the left groin.

He states that five years ago he received a blow on the testis from a carpenter's mallet; that the gland on that occasion swelled for a few days, but eventually returned to its natural size. Eighteen months since it again swelled, and was very painful, for which affection he is unable to assign any cause. In about four weeks it suppurated, and was opened, and the present sinus has remained ever since. A probe inserted into the sinus penetrates to at least the centre of the gland.

January 7.—The testicle was removed to day by Mr. Busk. The cellular tissue of the chord was found to be thickened, but without morbid deposit. The body of the gland even, and of the normal size; it contained a suppurating cavity, occupying half its bulk; the remaining tissue presented a cicatriform aspect, or that of white fibrous bands, the interstices of which were occupied by apparently natural tubular tissue. There was no morbid deposit of any kind. Three ligatures were applied, and the interrupted suture. Chloroform was administered during the operation.

Jan. 16, 11 a.m.—He has been going on favourably since the operation; the wound is nearly healed. Last night he

was attacked with pain in the lower part of the umbilical region, but made no complaint until this morning at the usual hour of visit. His countenance is pale and anxious; breathing rapid; pulse 120, small, but rather sharp; he complains of great pain, which commences in the right iliac region, and extends upwards to the umbilicus; bowels rather confined. He lies on his back, with the knees slightly bent.

To have immediately enema aquæ calidæ; cal. gr. ij.; opii gr. ss., 4tis horis. Fotus abdomini.

2 p.m.—The symptoms of peritonitis are more marked; there is very great tenderness of the abdomen; he cannot bear the slightest pressure.

Ordered—Hirudines xxiv. abdomini; opii gr. ij. st.; the abdomen to be covered with a light bread-and-water poultice after the leeches are removed.

10 p.m.—The leeches afforded him great relief for a short time; he took the opium in two separate pills; the first he vomited, the second he retained. The pain is now very intense; skin hot and dry; tongue furred; pulse 120, sharp; breathing very rapid, entirely thoracic.

V.S. ad ʒ xvj.; postea opii gr. ij.

Jan. 17.—The pain diminished considerably after the bleeding. He slept about two hours during the night. This morning, at nine o'clock, he was attacked with a griping pain in the lower part of the umbilical region and in the right iliac; face pale and anxious; pulse 132; abdomen hard and tympanitic; skin not so harsh and dry as before the bleeding. There is no external appearance of erysipelas. The pupils not at all affected by the opium. Opii, gr. ij. st.; to take cal. gr. iij.; opii, gr. ss. 3tiis horis.

18th, 11 am.—This morning the pain has abated, but he appears weaker. He has taken his pills every two hours since last evening, together with a little wine and beef-tea. He slept a little in the middle watch. Respiration 40; pulse 136; abdomen tense and tympanitic.

2 o'clock.—He has vomited during the last hour, and is troubled with hiccup.

Jan. 19.—He gradually sank, and died at half-past five.

Post-mortem Seven Hours after Death.—The cavity of the peritoneum contained about half a pint of serum. On raising the omentum, the intestines were seen matted together by effused fibrine; the cord and vas deferens were healthy; one gland in the inguinal region contained tubercular matter; a few scattered tubercles were seen in the upper lobe of the left lung. From the condition of the wound at the time of death, which was nearly healed, and free from all inflammatory appearance, the peritonitis would not appear to have been the immediate result of the operation, but rather of an erysipelatous nature. This supposition is further strengthened by the fact, that several other cases of peritonitis of a similar character occurred in the hospital about the same period.

British Medical Fund.—We are glad to notice, that an influential meeting of the friends and supporters of this Institution was held at Southampton on the 31st ult., at which Dr. Oke presided. Among the gentlemen present, were Dr. J. Bullar, Dr. W. Bullar, George Cheeseman, H. Dusautoy, C. P. Keele, G. B. List, J. K. Sampson, J. Shorto, J. Stace, W. Symes, and J. Wiblin, Esqs. Mr. Hawtayne, the secretary of the Society, having explained to the meeting the nature and objects of the institution, the following resolutions were moved and carried unanimously:—1st. That this meeting highly approves of the principles of the British Medical Fund, and strongly recommends the Society to the favourable consideration and support of the profession at large. 2nd. That the best thanks of this meeting be offered to Dr. Forbes and the directors of the British Medical Fund, for their indefatigable exertions in behalf of the Society. 3rd. That the thanks of this meeting be given to Mr. Hawtayne for his attendance on this occasion, and for his lucid explanation of the objects of the Society. 4th. That the best thanks of this meeting are due to Dr. Oke for his kindness in presiding on this occasion, and for his very courteous and gentlemanly conduct in the chair. We are happy to record the progress of this undertaking, and shall take every opportunity of giving it our warmest support.

Mr. Alston, of Elmdon-hall, has presented the sum of 50*l.* to Queen's Hospital, Birmingham, and the same amount has been contributed by him to the funds of the General Hospital. Lord Willoughby de Broke has given 20*l.* to the General Institution for the Blind, in the same town.

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LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, November 9.—Medical Society of London. *Subject*:—Mr. J. B. Brown on the Treatment of Ovarian Dropsy by Lateral Opening. Eight o'Clock.

Tuesday, November 12.—Royal Medical and Chirurgical Society. *Subjects*:—1. History of a Successful Case of Ovariotomy, by E. W. Duffin, Esq. With a Description of the Morbid Anatomy of the Sac. By Robert Lee, M D. 2. An Analysis of One Hundred and Eight Cases of Ovariotomy, which have occurred in Great Britain. By Robert Lee, M.D., F.R.S. Eight o'Clock.

Wednesday, November 13.—Ethnological Society. Eight o'Clock.

—— —— Pharmaceutical Society of Great Britain. Nine o'Clock.

Saturday, November 16.—Guy's Hospital Medical Society. Eight o'Clock.

—— —— Medical Society of London. *Subject*:—Mr. Hunt on the Mercurial Treatment of Syphilitic Eruptions. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 9.

THE SYDENHAM SOCIETY.

In common, we believe, with most members of the Profession, we have received a copy of the last Report of the Sydenham Society, and we take the opportunity of doing what we have been long anxious to do,—calling the attention of our readers to the labours of this valuable and well-managed Institution. On the completion of the seventh year of the Society's existence, the Council have taken a review of their operations from the commencement, in order, as they say, to enable the members "to judge how far the expectations which they were led to entertain have been fulfilled, and to what extent the main objects of the Society have been attained."

How well the Council have discharged the functions entrusted to them, and how deserving they are of the thanks of every well-wisher of the profession, will appear to all from a perusal of this Report. That the literary reputation of the profession in this country has been enhanced, and will be extended, through the medium of this Society, we feel assured.

It is not necessary, as the Council observe, to adduce further proof of the mercantile success of the Society than is afforded by the number of members which have been enrolled in the Society's books from its commencement, and the number of volumes—some of which have expensive

illustrations—which they have received for their seven annual subscriptions; and we rejoice to see, by the financial statement, that the annual income is more than sufficient to meet the current expenses. This, we are satisfied, could not, from the style in which the works are got up, have been the case, except by good management; for, like all other similar societies, when the novelty has somewhat gone by, and as the demands arising from other analogous societies multiply, some falling off in the number of members must be anticipated, independent of that arising from deaths and other changes.

It is gratifying to observe such evidence of the general approval and satisfaction with which the labours of the Council have been received. Considering the various requirements and tastes of so large a body of men, it is remarkable that on the whole the proceedings and publications of the Society should have been so generally approved. Doubtless the high character and standing of the gentlemen whose names have appeared in the successive lists of Council have contributed essentially to secure the confidence and approbation of the profession. This, however, in itself would not have been sufficient to uphold the Society, had it failed to accomplish the main objects for which it was instituted. The list of works prefixed to the present Report is an ample justification of the confidence which has been reposed in the ability and integrity of those to whom the conduct of the Society has been intrusted. But as this list, together with the Report, is doubtless in the hands of most of our readers, we need not occupy our space by reprinting the titles of these works. We do not pretend to say, that in every instance the propriety of the selection is beyond cavil; on the contrary, we are free to confess that in some instances we think a happier choice might have been made. And yet, in following the Council in their retrospect of their proceedings, under the different heads comprised in the fundamental law by which they were manifestly bound to be guided, we find it difficult to point out any great error of judgment, or to start objections to particular works which might not be satisfactorily answered. We took occasion, some time back, to advert to the great intrinsic worth of many of the ancient medical authors, and especially to the important practical benefits to be derived from a study of the Hippocratic writings. We were not then aware that the Sydenham Society had it in contemplation to publish in English a complete edition of the works of Hippocrates, nor did we think it would have been possible to comprise them in the compass of the two volumes so admirably edited by that eminent scholar, Dr. Adams. We have received these volumes with unfeigned satisfaction, and we hail their appearance as likely to contribute materially to the advancement of practical medicine in the present day; and, whilst admitting that it will be by the grave and experienced men that these volumes will be most appreciated, we yet earnestly commend their study to the junior members of our profession, assuring them that a careful, attentive perusal will amply repay them by the practical information they will gain, as well as by the mental improvement which they cannot fail to derive. Would that we had more such writings in the present day! But the Council have not been unmindful of our own worthies of by-gone times. The Sydenham Society's editions of the works of Sydenham, Harvey, and Hewson, will prove worthy and lasting monuments of the world-wide celebrity of these great British physicians.

Of the works in progress or in contemplation, we would call especial attention to the bibliography. We think it probable that some misconception may exist as to the general utility and interest of such a work; for of its real value, if well done, and of the necessity for such a work, there cannot be a doubt. Nor can there be any question that this is precisely the sort of work that should be undertaken by a flourishing publication-society like the Sydenham. If we rightly comprehend the scheme which the Council have put forth, their bibliography, when completed, will prove a work of the greatest utility and interest to all who occupy themselves at all with the literature of their profession. So convinced are we of the importance of supplying such a desideratum, that we trust the Council will not suffer themselves to be swayed by any objections against it, from those who would sacrifice to their own short-sighted wishes a general and lasting advantage to the profession.

Neurological studies acquire a daily increasing importance at the present time. That the elucidation of many of the most important problems connected with the nervous system may be advanced by a careful and enlightened study of the neuro-metaphysical doctrines which prevailed at the time and subsequent to the age of Willis, Hoffman, and Stahl, all must be convinced who, aided by recent discoveries, will take the pains to search the writings of the giant minds whose works have too long lain dusty and unheeded on our bookshelves. We rejoice, therefore, at the prospect of the edition of Unzer and Prochaska; and we trust that "the more important writings of the earlier British physiologists" will comprise those of Willis, Whytt, Glisson, and others whom we could mention as having done good service in laying the foundations of anatomy and physiology in Great Britain. We have some doubts, however, as to the judiciousness of such an expenditure of the funds of the Society as will be required for the "Edition of Hunter's Plates of the Gravid Uterus." That it will be acceptable to many of the superficial, self-styled practical readers, we doubt not. But, however politic some may think the issue of such works to be, we trust that the Council will not be diverted from the important objects for which the Society was established, and in the straightforward pursuit of which they have received the confidence of the public. We hope that the wide distribution of the present Report will make the profession more generally acquainted with a society which it is their interest as well as their duty to continue to support. But we entertain no misgivings of the continuance of popular support, so long as the Council continues to pursue, with the same integrity of purpose, the enlightened course which they have hitherto followed.

THE REGISTRAR-GENERAL'S REPORTS, AND MEDICAL ECONOMICS.

The importance of these Reports in determining questions of abstract science is now fully appreciated; but, if we mistake not, their bearings upon some interesting points relating to the daily business of the profession are yet but dimly discerned. If, a few years since, some unhappy surgeon, whose daily entry of cases exhibited a progressive and melancholy atrophy, chanced to meet, in the course of his desultory rambles, a brother practitioner, and, after the ordinary inquiry respecting the state of business, was assured, in a cheerful tone, that it was never better,—that his list increased every day,—that scarlet fever and measles were very prevalent,—and, as for midwifery, he had been out every night but one in the week; — the querist, after such information, would have returned dolefully to his family, conned over his day-book and ledger, and, fearing that some newcomer or hungry chemist had carried off his practice, would, amidst lamentations and sighs, pusillanimously have

concluded that he should never do any more good in that neighbourhood, and straightway have drawn up an advertisement, setting forth the varied advantages of a corner house, situated in a genteel neighbourhood, near some aristocratic square or populous thoroughfare, and of which, for private reasons, the advertiser was anxious to dispose. This sentence describes the feelings of many medical men at this moment, and would be a faithful transcript of one of the most interesting pages of the autobiography of ninety-nine out of every hundred general practitioners who would take the trouble to communicate their experience to the world. The obscurity that formerly enveloped medical practice, and the uncertainty that always has, and, in some respects, always will characterise it, made a period of slackness one of most alarming anxiety, and surgeons sunk into a state of despondency proportionate to their ignorance of the causes of their unwelcome leisure.

Medical men need no longer be agitated by vain fears. They have only to consult the hebdomadal oracles of the Registrar-General, and the fogs of dismay will be chased from the mind by the steady light of statistical truth. The varied testimony of general experience is here gathered into a focus, by whose illumination each man may ascertain his exact position among his neighbours, compare his progress or retrogression, in several years, or even in the same weeks of several years, in relation to the amount of mortality in his district, adjust his expenditure to his probable receipts, and conduct his affairs with the accuracy of a mathematical demonstration. No man now, unless driven by sheer necessity, should abandon his practice without consulting the opinion of the Registrar-General. He may be assured that judgment will be pronounced without fear or favour, and under the sanction of the most extensive collection of facts, and the most irrefragable arguments.

Let any dispirited practitioner remember that the mortality in the metropolis throughout the whole of this year has been far below the average amount,—a result referrible to that great law in physics by which we observe that the years immediately succeeding the ravages of an epidemic disease are always more salubrious than ordinary periods. We do not intend to offer at the present time any explanation, either obvious or recondite, of this law, our object being simply to exhibit its bearings on the economical interests of the profession.

Should any gentleman still have misgivings of his neighbour's inauspicious influence over his affairs, we advise him to consult again the oracle of Somerset-house, and, according as it pronounceth, his suspicions will be either confirmed or dispelled. If we refer to the weekly return for the week ending October 26, we shall find that the surgeons in the Kensington district, the first on the list, ought to be in high feather, the mortality being considerably above the average for corresponding weeks in former years; while, as regards Lewisham, the last on the list, the discontented practitioner may feel some consolation in being informed, that it is mathematically impossible that he can be busy, as the mortality in his district is only one-third of its ordinary amount. The mortality in Lewisham for that week was only 10; and, as there are computed to be 28 attacks of sickness to one death, there could be only 280 fresh attacks in that Union during the week in question. The surgeons in that district have only to divide the number of cases among them, in proportion to the probable annual amount of their respective practices, and the problem is solved.

To the practitioners of Kensington we say, if there be any one among you, whose business last week was unusually dull, it is time for you to reconsider your position, and to make an extraordinary effort, for the emergency justifies your fears and demands renewed exertions. It has appeared to us, that in showing how the reports of the Registrar-General may be employed as a silent counsellor of the medical man in the varied circumstances of daily practice, we should be commenting upon them in a manner that would draw towards them more general attention, and make them economically, as well as scientifically, useful to the members of our profession.

DISTRESSED MEDICAL MEN.

It is one of the most painful experiences of an Editor to be made the recipient of private sorrows, and the occasional witness of instances of destitution and suffering, that reveal but too significantly the unknown but wide waste of wretchedness that exists in our profession. A case of this kind has lately come to our knowledge. A physician recently applied to us for a loan of 4*l.* to relieve immediate necessities. He informed us that a distress had been levied upon his goods, in consequence of proceedings that had been taken against him in a County Court, and that his family was reduced to extreme privation.

On supplying him with the money, we observed, as he raised his coat to deposit it in his pocket, that his trowsers were literally dropping piecemeal from his back. We insert below a letter from another gentleman, and we hope that he may be fortunate enough to procure such a situation as he desires. We cannot but think, however, that the case of "X. Y. Z." is not one that should be left to the ordinary chances of commercial requirements, but that it appeals powerfully to the professional sympathies of our more fortunate and richer brethren. One medical man, able to help, should not, for the honour of his order, permit another to sink into a state of such extreme destitution as that described, without sympathy or succour; and we are convinced that the profession at large will not be wanting in their duty to a professional brother under circumstances of peculiar and urgent affliction.

[To the Editor of the Medical Times.]

Sir,—I am a medical man, with a very large family; through sickness I am brought to much poverty; in fact I know not how to procure food. I wish to obtain a situation; will you either insert an advertisement in your excellent periodical gratuitously, or trust to my honour for the payment of the same when I meet with an engagement. I would not ask this, but cannot command a penny. An answer in your Notices to Correspondents to X. Y. Z. will meet the eye of your obedient servant.

Nov. 4th, 1850.

We have not, for obvious reasons, appended our Correspondent's name and address; but we will receive communications or contributions for our distressed brethren, and readily act, in connexion with the Chairman of the Benevolent Fund, in appropriately applying any subscription that may be forwarded.

REVIEWS.

The Anatomy, Physiology, and Pathology of the Eye. By Henry Howard, M.R.C.S.L., Surgeon to the Montreal Eye and Ear Institution. Montreal. 1850. 8vo. Pp. 517.

There are good surgeons, astute, observant physicians, and cautious, practical accoucheurs in America. Among the former, Mott, Hays, Gibson, Mutter, and others possess a European reputation; but it is unnecessary to enumerate names; American medical literature is, like everything else in that great "go-a-head" country, on the move. We only wish that it

was a little more original, a little more decided in its opinion, not quite so diffuse—a little more refined in expression. We suppose there are sore eyes in America. Over that immense extent of country, possessing so many different climes,—liable to so many atmospheric vicissitudes,—with a tropical atmosphere at one season and in one place, and an arctic coldness at another,—in the jungles, by the deep quaggy river, or the vast sea-like lake; where the backwoodsman plies his axe, as well as in the narrow lanes of its huge cities, and by the damp, miry quays, on which, from hour to hour, the stinking emigrant vessels vomit forth their unhealthy, squalid contents,—we would naturally expect a great amount and variety of diseases of the eye. We have, however, no authority to warrant us in conclusions on this subject. We have no reports of institutions nor statistical documents which throw any light upon the prevalence of ophthalmic diseases in the Western Hemisphere; whether there are any peculiar to the country; whether epidemics of ophthalmia prevail at certain times or in particular places, or affect any particular class of the population; or whether there are any diseases to which one race is more liable than another; or, whether cataract is or is not of common occurrence in the United States, &c., &c.

The most popular work upon diseases of the eye in America is an English one—the edition of Lawrence by Dr. Hays, of Philadelphia. It is embellished with illustrations, and contains several additions by the learned editor. The same gentleman has also edited Mr. Wharton Jones's "Ophthalmic Medicine." The only original American work on ophthalmology is Dr. Littell's "Manual of Diseases of the Eye," a reprint of which appeared in England in 1838. Dr. Frick, of Baltimore, has, we believe, compiled a treatise on ophthalmology from the most esteemed European works, and lately, Dr. Clay Wallace, of New York, has engaged public attention by his scientific notices on the Physiology of the Eye, its Mechanism and Adaptation to Distance in particular, a subject which was much mooted in Great Britain some twenty years ago, and on which Sir Philip Crampton, of Dublin, published a very elegant and ingenious treatise.

It is no uncommon question for the young American physician or student who visits this country to be asked, during his "rounds" of some of our hospitals, either general or special, "Do you see many cases of cataract in your country? What operations are generally resorted to for their cure?" "Oh, we can't answer that question. We see a few cases of cataract in the hospitals occasionally. They are generally 'needled' by Dr. Hays; but the process is so long, that we seldom know much about the result." What says Dr. Hays himself on this subject? "This operation (that by solution or absorption) is the one usually performed at Wills's Hospital by the editor and his colleagues, and the results have been remarkably satisfactory. It is applicable, we are convinced from ample experience, to a larger number of cases than has usually been supposed, and may be successfully resorted to even in hard cataracts, by adopting the mode of operating to the condition of the lens." (Edition of Lawrence, 1847, p. 659.) Dr. Littell says, that this operation "requires little manual dexterity; it is attended with less danger to the eye than either of the others, (extraction or depression,) and may be employed in a multitude of cases where, from complication and other causes, extraction is inapplicable." But with this opinion Dr. Hays does not agree. He reviews the very expression of his colleague, and very properly says: "To perform this operation well, requires skill, experience, coolness, and judgment." But perhaps there is a difference in the modes in which these gentlemen perform the operation, as there is, in all likelihood, in their ideas of the principles on which it is founded. Mr. Littell believes (p. 228) that the removal of the lens is "by the agency of the aqueous humour, *admitted through an opening in the capsule.*" If this operator has had many cataracts to deal with, and if he merely *admits* the aqueous humour through an opening in the capsule, his countrymen must possess great faith, hope, and patience to endure it. And he himself must have to treat many cases of siliquose cataract, formed by the thickened capsules, rendered opaque and hard as egg-shell, by the inflammatory process necessarily set up in them coming together, squeezing the softened pulpy lens through the aperture or rent made in the anterior capsule *to admit the aqueous fluid*, and then remaining behind the pupil unabsorbed for years. Without cavilling, however, at the *modus operandi*, or the result which follows, we learn that absorption is the general method in use for the removal of all cataracts, hard and soft, in old and middle-aged, as well as in young persons, throughout America.

A new work upon diseases of the eye has just issued from the American press: the title of it heads this notice. We must, however, state that it is only Canadian. We have turned over its pages to look for something new, but we have found it scarcely better than a compilation, and not a very select one either. The old adage was never more applicable—"What is new is not true; what is true is not new." But the author has dealt so hardly with himself, that we feel rather disinclined to criticise his views. His book is the Canadian exponent of the veratria and prussic acid "cure" for cataracts and corneal opacities,—a humbug which has been scouted from England years ago. The cures performed by these remedies Mr. Howard published long since. The cases he detailed were reviewed in some of the British periodicals at the time, and met with rather a severe castigation; yet he has magnanimously introduced into his compilation—we suppose by way of filling stuff—several of these criticisms! We really find some difficulty in again introducing the subject of prussic acid as a cure for diseases of the eye, in the same way as we should fear to trespass on the patience of our readers by now discussing the merits of the old exploded lithontriptics. But we have still greater difficulty in dealing with the opinions and descriptions of an author who thus expresses himself:—"A servant had been gradually losing the sight of the left eye for some time, but had lost it completely for the last eight months. Dr. ——, to whom she had applied, told her nothing could be done for her. On examination, I found an albugo completely obstructing the pupil of the left eye; in fact, occupying the whole cornea. Cured in two months." P. 398.

A considerable portion of Mr. Howard's book is occupied with the subject of cataract, and the operations recommended for its cure. With these we shall have to deal presently; but, in the mean time, we are at a loss to understand why he should recommend operation at all, having in his hands the means of curing that disease by "keeping the pupil dilated by means of atropine or belladonna; fumigating the conjunctiva once every day with hydrocyanic acid, brushing the eyelids and eyebrows with the solution of veratria, insulating the patient, and drawing electric sparks from round the orbit and from the eyelids, and keeping up a counter-irritation behind the ears by applying to these parts the tincture of iodine." "By the above treatment, long persevered in, I have," he says, "not only succeeded in curing hundreds of cases of incipient cataract, but have also in very many cases succeeded in giving old people who could not make their way alone such sight as enabled them to read a moderate-sized print."—P. 355-4. Guarded as the latter portion of this sentence is, the assertion put forward in the paragraphs quoted above with respect to the curability of opacity of the lens by remedial agents, is well worthy of attention, both by the profession and the public. That many persons affected with cataract occupying the central portion of the lens or its capsule, are rendered comparatively comfortable for years simply by keeping the pupil artificially dilated by belladonna, is a fact with which the profession generally is well acquainted; and if the cases related by Mr. Howard were improved in the manner he states, it was owing to the employment of belladonna in a particular form of cataract, and not, as he innocently supposes, to the action of prussic acid or veratria, or any other such means. The mesmerists and the homœopaths pretend to cure cataracts also; and there are at this moment, both in London and Paris, money-making charlatans, as well as the renowned Dusseldorf doctor, who pretend to cure cataract by fumigation, &c., without operation. Where are their cases? Where is the single well-established instance of an undoubted opacity of the lens or its capsule, advanced to what was decided cataract, and which had been previously seen and examined by any authority competent to pronounce upon it, or of which a faithful drawing had been made, and accurate notes taken of the amount and peculiarity of vision previously enjoyed by the patient, which has been removed by one of these gentlemen? We here, in the name of honesty, of truth, and of science, as well as of humanity, demand the proofs. We are, moreover, willing to have the matter tested by experiment, and will give a fair trial to any means, either known or secret, recommended by these gentlemen. Have the Druoux of Paris, the Le Louves of the Rhine, or

the Howards of Montreal, acquired more knowledge, or brought science to bear more effectually upon the class of diseases we are now discussing, than the Jägers, the Rosas, the Sichels, and Jüngkins, of the Continent; or the Dalrymples and Alexanders, the Lawrences and Guthries, or Travers, of this city, or of Dr. Mackenzie, of Glasgow, or Mr. Wilde, of Dublin.

But Mr. Howard has brought forward proofs of his assertion:—"The three following cases of cataract will illustrate the possibility of this disease being sometimes cured without operation." Let us fairly examine into the merits of these cures. The first case was that of a lady aged 75, "well known for many years in the higher ranks of society in Montreal," whose "dimness had rapidly increased for the last two months, so that at that time she could hardly know one person from another except by their speech." Mr. Howard says: "On examining her eyes, I found she had capsulo-lenticular cataract of both eyes, so far advanced in the left as to be *ripe for operation*, but not quite so far advanced in the right eye. I at once saw that she was not a fit subject for operation, and therefore determined on another mode of treatment; and although I did not promise her, nor expect myself much benefit as the result, I had the satisfaction of seeing her, as had also many others, able to read her Prayer-book after the space of about two months, during which time I saw her every second day, when I fumigated her eyes with the hydrocyanic acid, *having the orbit smeared round at night with the extract of belladonna*, not being able to procure atropine at the time. During my treatment her physician was giving her tonics. This lady is now dead. Were she living, I know I should have full leave to mention her name."—P. 356.

What became of the cataract? Mr. Howard saw it in the capsulo-lenticular form, "ripe for operation," upon the 21st January, 1846; and surely he had the same opportunity,—nay, better, for the pupil was dilated by belladonna,—of observing what was the condition of the lens at the end of the two months during which she remained under his care. Was it absorbed? Was it displaced? Did it gradually disappear before the fumigating powers of the prussic acid, or did capsule and lens—for both must have been got rid of in this instance—pop out of the eye by any miraculous power? The narrator is silent. The case closes with the last quotation. Which of our medical or surgical readers believe it?

The second case was also "a lady, well known to nearly every person of respectability in the Province of Canada." She was aged 57, and had been blind of her right eye for a long time, and the left eye had lately become so dim, that upon the 18th of January, 1847, when she applied for advice, "she could not read with it, nor, indeed, make much use of it." "On examining her eyes, I found she had capsulo-lenticular cataract of both eyes; ripe for operation in the right." "She attended me daily for nearly a month, when she left me with the sight of her left eye so perfectly restored, that she could read and write with ease." (P. 356.) The treatment is not detailed, nor one word written as to what became of the opaque lens and capsule; but we subsequently learn, that a great change for the better had taken place, even in the right eye. We have no desire to be hypercritical, particularly in reviewing a work where there are so many startling statements and broad assertions to be gravely considered; but there is a little discrepancy in the dates given in this case, and those in the recommendatory letter of the patient, which mar the unity of the whole, and prevents the chain of evidence hanging together as well as the author and his friends might wish. This should be looked to for the second edition.

The third case—a very bad one indeed—is that of a gentleman, an "Esquire of Montreal," an "astronomer," aged 78, who "had been blind of his right eye since February, 1789;" but he must have made good use of his left, for we learn that he was a "surveyor under the sixth and seventh Articles of the Treaty of Ghent." Well, the history of the case, as detailed by the patient, is not very instructive, nor the slur cast upon "two well-known medical men," under whose treatment he had previously been, characteristic of the good taste of the narrator; so we will proceed to the examination. He also "had capsulo-lenticular cataract of the left eye, *fully ripe for operation;* and a cicatrix in the centre of the right cornea so surrounded by lymph"—lymph, it must be remembered, of fifty-nine years' standing,—"as to render the whole of the cornea opaque, causing it to appear as though the sclerotica extended over the front of the eye; not one portion of the iris was observed *a bit* through it." By fumigating with prussic acid, brushing with solution of veratria, and sparking with electricity, this gentleman was cured. Oh! yes, we had nearly forgot. The author says:—"Occasionally I dropped on the conjunctiva the *two-grained solution of atropine*."—P. 358. What was the result? We read, that at the end of "three months he was able to read and write, and is now able, *so far as sight is required*, to read and write at all hours during daylight." I then examined his eyes, and found scarcely a vestige of cataract remaining in the left eye, and the right cornea so clear, that the whole of the iris and pupil were visible; even the cicatrix was much smaller, indeed not more than half its original size." Small indeed must have been the cicatrix, brilliant the lens, and active the retina; but above all, highly practised must have been the entire organ, and powerful the memory, which could have enabled him at that time to see "*a particular star with his right eye for the first time since he was the age of nineteen.*" Do not laugh nor look in such amaze, cautious practical reader! The fact is stated as we have placed it before you; and, remember, this is not a Yankee production.

Before we proceed to examine into the operations for cataract, we have just to draw the reader's attention to a mode of treating ulcers of the cornea, which may possibly be worthy his attention; though some of the modern school, and the pupils of the late Mr. Tyrrell in particular, may be unwilling to follow it. At page 387 we read:—"In fact, an ulcer of the cornea is the better of being *always* coated with the nitrate of silver, for it gives the patient relief; as the great scalding pain is produced by the tears running over the raw surface of the ulcer, so, when the nitrate of silver is worn off, the pain that for a time had been relieved returns again."

Let us now turn to the operative part of the work under consideration. As there is no definite arrangement observed by the author, and we have to skip from page to page backwards and forwards in order to collect his meaning, our readers must excuse us if we appear a little discursive. At page 425 of the section upon Cataract, Mr. Howard—perhaps justly—launches into a sarcastic philippic against his fellow-operators, feeling astonished "how little some persons seem to value the sight of their fellowmen," for they "will insert a knife or needle into this most delicate of organs, cutting and carving it as if they were amusing themselves with the eye of a dead ox. * * * It is not an unusual thing for a person to be led to me, who, upon inquiry, informs me, 'I had a cataract upon my eye, and Dr. ——— operated upon me, promising to make me see, but I have never had any sight since, and I saw a little before he cut my eye.' On examining the eye, perhaps I find the *iris rent in pieces* by the needle of the operator, or the vitreous humour *all torn up*." Now, we defy any operator, by either the most dextrous manipulation or the greatest bungling, to tear the iris into pieces within the eye. Sooner than such an event could happen, even though that delicate membrane were adherent by its pupillary margin, it would be dragged from its ciliary attachment; and as to the diagnosis concerning the tearing up of the vitreous humour, we must leave our readers to form their own opinion. A fluid state of the vitreous humour, a practised eye and a delicate finger will often at once detect; but whether formed by any morbid process going forward within the eye, or the result of the delicate cells and sepitamenta having been "all torn up" by the needle of the operator, is more than European oculists are able to determine. Those who are in the habit of either themselves performing, or witnessing the operation of extraction as performed by others, will perhaps appreciate the value of the following recommendation, as well as the cause assigned for the accident. Describing wounds of the iris occurring in making the section of the cornea, where the pupil bulges over the knife, Mr. Howard says, "this accident is caused by the pressure of the aqueous humour upon the iris, therefore the operator, *before making the counter puncture*, should let some of the aqueous humour drain off"!—P. 426. In the following page we hear a good deal about "trying to adjust the edges of the wounded cornea," as if it was a flap formed by a sabre cut upon the thick of the thigh, and that it became a question whether the "bloody suture" or adhesive plaister were more applicable;—of the lens being found brittle, so as to "break into pieces;"—of introducing the scoop into the anterior chamber, "and the cornea pushed outwards" until the aqueous humour is re-secreted, and of everting the edge of the cornea, as "the flap may turn in and prevent the wound from healing."

These, however, are but preliminary remarks. We now come to the grand process; the patient having been first caught, "is then strapped tight in the chair, so that there is no possibility of stirring."—P. 434. We have but few observations to offer upon the Canadian mode of making the section of the cornea. Mr. Howard gives a very fair description of how it *ought* to be performed with Beer's knife, but, as he does not adhere to it himself, it concerns not the reviewer nor the reader of his work. If our readers will look into some of the older works on surgery, they will find a form of phleme represented as a useful instrument for those who are not familiar with the art of "breathing a vein." It is somewhat like that still used in farriery. Various forms of it, with and without springs, may be seen in the great *Armamentarium Chirurgicum* of Blazius. See also Benjamin Bells "Surgery," vol. iii. p. 6. Such instruments, though obsolete among modern surgeons, may occasionally be found in the carpenter's tool-box of a merchant ship. Somewhat after the same fashion is the triangular blade, fitted with certain screws and adjustments, which the author of the work under review, finds most convenient to *push* through the cornea into the anterior chamber, so as to complete a section of one-half of that membrane. It is described at page 436 of his work, for the benefit of those who may wish to be further informed on the subject. The section having been completed, and the capsule lacerated, "the third part is performed by gently rubbing the lids with the fingers over the eye-ball, producing slight pressure upon it," the lids being closed, and the lens still in position; but in a note he adds, "I have however sometimes found it necessary to make *much pressure*." We think this will do for the operation of extraction.

We must here, however, take leave of the subject, premising that there are some other circumstances connected with the operations for cataract by the needle, and some opinions advanced, of which, as we believe, Mr. Howard's work is but the reflection, and which we shall perhaps take an opportunity of noticing upon another occasion.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ON THE SALTS CONTAINED IN CHOLERA EVACUATIONS.

By Dr. GUTERBOCK.

The following are the author's conclusions, drawn from the chemical examination of the stools in cholera :—

1. A most remarkable circumstance is the large proportion of water, amounting, on an average, to 98·119; while, according to Berzelius, normal stools contain 75·3. The specific gravity, too, is remarkably low, varying from 1006 to 1008; the urine itself, in but few diseases, manifesting so low a one. 2. The solid constituents amount on an average to but 1·581. 3. Among these, the inorganic *salts* constitute by far the largest portion—upon an average 4-5ths, the organic matter being only 1-5th :—a proportion that is the reverse of the normal, in which the organic parts form 19-20ths according to Berzelius, and 9-10ths according to Rose. 4. Among these salts the most remarkable is the *chloride of sodium*, constituting, upon an average, nearly ½, and in some cases 2-3rds of the whole. The cholera stools contain nearly ½ per cent. on an average, while, according to Berzelius, the normal proportion is but 0·28; and according to the latest analysis of solid excrement, by Rose and Fleitmann, this proportion is even unusually large, as in 100 parts of the entire salts only 1-58th was chloride of sodium. Thus the cholera stools contain a hundred times as much salt as the normal; and, indeed, so considerable is the quantity, that, after the evaporation of the fluid, the unassisted eye recognises the characteristic crystals. 5. Next to this the *carbonate soda* is most abundant; and besides these, are some phosphate of magnesia and lime, and a trace of the sulphate. The absence of *potass* in the stools is remarkable, forming as it does a chief saline constituent in the normal solid stools. According to Rose and Fleitmann, these contain 22·49 per cent., while in the cholera stool only a trace is detectible. 6. The organic matters of cholera stools consist in great part of mucus and the remains of epithelium, and it has generally been believed that they are rich in albumen. The experiments of the author and of Corenwinder contradict this, for they either found it entirely absent or mere traces present. Masselot (*Gaz. Méd.*, No. XIV., 1849) states that he found a considerable quantity; but as the stools were compared to soup in colour, they probably contained blood—an important point to be borne in mind during investigations for albumen. In almost all cases a small quantity of casein is present, especially in stools removed after death. 7. The abdominal discharges were always alkaline, but the *vomits* neutral or slightly acid. These latter, too, contained a still larger proportion of water, viz., 99 per cent., and were little above the specific gravity of water. Upon an average, the salts constituted about a half of the solid matter; but the proportion between these and the organic constituents was not so constant as in the alvine evacuations. So also the proportion of chloride of sodium varied, but it never exceeded that of the other salts. No albumen was present. 8. The contents of the bowel thus appear to become changed in their passage, not only by the presence of broken epithelial scales, but also in chemical composition, being richer in organic constituents than when they have passed the anus. 9. It is to be expected that the increase of chloride of sodium in the stools is contemporary with the diminution of the substance in the blood noticed by O'Shaugnessy, Rayer, and Mulder; but the cessation of the epidemic prevented Dr. Güterbock examining this point for himself. Supposing future researches to affirm it, it is only one step towards explaining an increase which, compared with Rose's analysis of normal excrement, is a hundredfold. According to this chemist, a large portion of the chloride of sodium is excreted in the urine—almost 600 times as much as in the stools; and the arrest of the secretion of urine during cholera may explain the enormous increase in the stools.—*Poggendorff's Annalen*, Band LXXIX. p. 323.

ON A DISEASE OBSERVED AMONG SOME WORKERS IN ZINC.

MM. Landouzy and Maumené (of Rheims) have described to the French Académie a disease which they termed "zinkal intoxication," a phrase derived from the analogical terms "mercurial and saturnine intoxications." It occurred under the following circumstances :—

The wire used in the corking the bottles of champagne is sent in quantities of from two to twenty pounds, to workmen called "tordeurs," who, by means of an ingenious apparatus, cut the wire into the requisite lengths, and twist it. These workmen have performed this duty for many years, living under most unfavourable hygienic conditions, without being in any way affected, until January, 1850, when the ordinary iron wire was replaced by what was termed "galvanised wire," that is, wire covered with zinc. Speedily the workmen complained of experiencing a sweet taste in the throat, of having incessant need to cough and spit, of shivering, general feeling of illness, &c. M. Landouzy being charged to inquire into these cases, found the following condition of things. Six workpeople were employed in the fabrication, four men and two women. All were attacked. Four experienced exactly the same symptoms, viz., general prostration, shiverings, headache, anorexia, extreme thirst, violent pain in the throat and at the angle of the jaw and the laryngeal region, with dysphagia, swelling of the submaxillary glands, swelling and ulceration of the tonsils, redness of the palatine arches, white pellicles on the gums, salivation, fetid breath, and finally colic and diarrhœa. In a fifth case, colic and diarrhœa were the only symptoms. In the other there were colicky pains and nausea, but obstinate constipation instead of diarrhœa. In three cases the symptoms came on after working with the zinked wire for six or eight days; in another, after fifteen days; and in the two others, after three weeks or a month. In addition to these cases, a boy of three years, who slept in one of the workshops, was attacked with angina, cough, and expectoration.

On examining the iron wire, it was found to have been hastily fabricated, and to be covered with a thick powder of zinc, of oxide and carbonate of zinc, of a mixture of iron and zinc, and of oxide of iron. There was no trace of lead.

The same workers, fifteen days later, recommenced their work in the same workshops and with the same wire, from which all powder was carefully detached, and no ill effect whatever has resulted.—*Gazette Médicale*, Juin 8.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

A VICTIM TO SCIENCE.

Every one knows the experiment which introduced Franklin to notice, and formed one of the earliest titles of that great man to celebrity. A host of imitators have followed, with various success, but little advancement of science. Sometimes, indeed, as in balloon cases, and other experiments with unmanageable materials, accidents of a serious nature have been the result. We had an example here lately. The elevated hills of Belleville were the scene, and some Belgian *savans* the actors, — the object, meteorological phenomena. A number of kites, each furnished with a conductor, had been raised to a very great elevation, and, although the day was beautifully fine, with a cloudless sky, electric sparks, from eight to ten feet long,—flashes of lightning, in fact, on a small scale,—were extracted from the upper regions of the atmospere. The spectacle, resembling as it did a miniature storm, was a most curious one, and attracted a large crowd of astonished spectators. All on a sudden a large flash, accompanied with a rushing sound, was observed, and one of the philosophers was struck to the earth completely deprived of consciousness. By some strange forgetfulness or neglect he had omitted to grasp the glass handle attached to the string of the kite, and intended to isolate him. A medical man was fortunately on the spot, and succeeded in restoring life after some time; but the right arm, which had received the shock, remained completely paralysed. This unfortunate accident of course put an end to the experiments; but they are, I understand, to be resumed.

Electrical science is still in its infancy, and, however dangerous may be the effort to master such an agent as the electric finid, it is not one beyond the power of the human mind. In the air above, and in the earth below, we have two immense reservoirs of a power, compared to which steam is but a pigmy, and if, as will soon be the case, we are able to converse with a friend in China, (a) just as freely as if he were on the other side of our "mahogany," it is not too much to hope that some mode may be discovered of extracting this wondrous agent from one or other of its reservoirs, and submitting it, like other forces, to human control.

Perhaps Dr. Elliotson, or some of your other mesmeric friends, might begin and try if they could not pocket a flash or two. They do things just as difficult every day.

ANOTHER SCIENTIFIC VICTIM.

This heading does not relate to any bodily accident, but to a villanous trick which some audacious *charlatan* has played on the worthy director of the Saville-street Institution for Diseases of the Ear.

The walls of Paris are now covered with enormous placards, ornamented with a gigantic ear, (single and in the centre, like the eye of Cacus,) all around which are announcements of Mr. Yearsley's cure for deafness. The thief, whoever he be, has taken the French translation of Mr. Yearsley's memoir — his acoustic drops (carefully abstaining from letting the public know they are nothing but water)—his bit of cotton—his ticking machine—his probe—the whole apparatus, in fact—and offers the lot, together with assurance of certain cure, for the moderate sum of 16 francs, ready money. Mr. Yearsley, of course, is totally ignorant of the shameless plagiarism of which he is thus made a victim; nor has it entered into the mind of any one to connect him with the matter. I mention it, indeed, merely as one of the occurrences of the day—an example of what straights some people are reduced to for a *viaticum*. There is, however, little prospect of the scheme proving successful. Homœopathy is the only delusion which has any great vogue here just now, the recent exposures having almost extinguished the mesmerists.

THE MILITARY MEDICAL SCHOOL.

The re-organisation of this school of instruction for military surgeons has, as usual, given rise to a vast quantity of intrigue and corruption between the candidates for professorship. As the concours is not applicable to the first appointments, though it will be to all subsequent ones, the election becomes vested in the Minister of War. He has rejected the former professors of medicine and surgery, MM. Levy and Baudens, substituting for the former, M. Maillot, a second class physician from the Lille Hospital, and for the latter, M. Sedillot, of Strasbourg. The other chairs of operative surgery, chemistry, and military hygiene are conferred on their former possessors. Little objection can be offered to the nomination of M. Sedillot; but it is very questionable whether the new professor of military medicine be as competent to fill that important chair as M. Levy.

TREATMENT OF AGUE.

The increasing price of quinine renders it a matter of the first importance to obtain some efficacious substitute for a remedy which is beyond the means of the poor, and a heavy charge for public establishments. The Government and the Pharmaceutical Society, as I mentioned in a former letter, have offered a prize of 400*l.* to any one who shall discover an artificial mode of manufacturing sulphate of quinine. But, as there seems little prospect of any one carrying off the prize, attention is in the mean time directed to the discovery of a substitute.

The military surgeons are all in favour of arsenic, which was introduced into French practice by M. Boudin, of Versailles. M. Maillot, the new professor at Val de Grace, has likewise been experimenting this remedy on a large scale at Lille, and the result of his experiments is, that arsenic is the best substitute which can be found for quinine in the treatment of intermittent fever. It is less certain in its effects, and less prompt in its action; but seldom fails eventually to arrest the disease.

At la Pitié, M. Piorry has been making some experiments likewise with the chloride of sodium or common salt. The number of cases submitted to this mode of treatment were not, it is true, very numerous; being only eight in number: but they all got well rapidly; and, what is still more worthy of notice, the congestion and hypertrophy of the spleen were observed to diminish more quickly under the influence of salt than under that of quinine itself. This is a remarkable fact, if further experience confirm it. The doses of salt employed by M. Piorry were from half an ounce to an ounce; and the celebrated author of the "Plexiometer," who may be supposed to be a very competent authority in this matter, assures us that in several cases the spleen was reduced to its normal volume after the second dose. Hitherto this has been considered as a specific effect peculiar to quinine, and possessed by it alone. This, perhaps, may be the place to allude to some interesting analyses of the blood in cases of intermittent fever, made by Professor Cossi, of Tuscany. He has found a considerable diminution, though without change in quality, of the fibrine, albumen, and fatty principles. In three out of four cases, the blood contained a considerable proportion of cholesterine, while the phosphates were entirely absent.

On the other hand, I may observe that the French chemists have found a diminution of the globules as the chief characteristic of the blood in persons long subject to ague. The chemistry of the vital fluid is yet, I fear, a very imperfect science.

SCOTLAND.

THE LAW OF LUNACY.

Considerable interest has been excited here by a trial which took place a fortnight since at Cupar, in Fife, before the local magistrate, at the instance of the public prosecutor for the county, in which it was sought to convict Alexander Hain, formerly a shopkeeper in that town, of lunacy, for the purpose of having him placed under restraint in an asylum. It appeared from the evidence, that, at various times during the last nine years, Hain had been apprehended and put in confinement or under restraint on account of threats of committing injury or actual violence, the effects of delirium tremens or other excitement by drinking. He had been confined in the asylum at Perth, in that at Dundee, and also in the asylum at Glasgow, and there was medical evidence that he had been more than once privately under restraint on account of delirium tremens. The superintendent of police of the county of Fife gave evidence that he had been sent for on several occasions by Hain's relatives on account of his violence; that on one of these occasions, about six years ago, he found Hain locked up in a room smashing everything and endeavouring to force his way out; that he had a knife in his hand and was crying to get at his brother to stab him with it. Various other acts on this and other occasions were proved against him, such as seizing a man by the hair of his head, lifting an axe against a peace officer, and beating another on the head with a fire shovel. It appeared that on the several occasions on which he was confined in an asylum, the symptoms of derangement quickly wore off and he was dismissed. During the five or six years previous to August last he had visited Cupar only at intervals, but about the middle of that month he appeared in

(a) This is no exaggeration. The electric fluid travels at the rate of from eighty to ninety thousand leagues a second. The electric press now prints about thirty letters per minute. It will soon print 200,—that is, as fast as a man can speak.

the town, expressing great indignation against the several medical men there who had formerly signed certificates of his insanity, and late at night he had gone to the houses of several of them and created a disturbance. A warrant for his apprehension was in consequence issued, but he had left the town and did not return till the end of September, when he was apprehended on the same warrant. Along with a medical certificate of Hain's insanity, the public prosecutor then presented a petition to the local magistrate, praying him to grant a warrant for his confinement as a person dangerous to be at large. The magistrate (the sheriff-substitute) appointed an early day for hearing evidence on the petition, and this constituted the trial. It appeared, that between the time when he left Cupar in the middle of August, after making the disturbance at the houses of the medical men, and his return in the end of September, he was chiefly in Perth, and that he attracted attention there by his disorderly conduct; he collected crowds about him in Perth, in the early part of the evening, and was seen later at night going through the streets, cursing and swearing, striking the pavement, the window-shutters, and doors, with his stick, and threatening the inhabitants; and on one occasion he was observed, between twelve and one o'clock in the morning, preaching at a church-door without an audience; and, further, he had been carried to the police-office for disorderly conduct. On the other hand, the woman with whom he lodged at Perth saw nothing violent or dangerous about him, and thought him a very pleasant gentleman; though she admitted she had seen him excited by liquor even during the day. During this period he had entered into an agreement with a market gardener, a short way from Perth, to let him a part of his house; and, according to the gardener's evidence, he passed the last three weeks of September daily, from half-past six in the morning till six in the evening, with the exception of an hour and a half in the middle of the day, when he went to Perth to dinner, either in working in his orchard or in superintending repairs on the rooms which he had taken from him; and during all this time he never observed either that he was of unsound mind or that he was addicted to liquor; and the house carpenter, who was employed to make the repairs, gave similar testimony. Several of his former neighbours in Cupar gave testimony in his favour. One of these considered him a man of sound mind and a good man of business, and never saw him what he called drunk, but had seen him excited with liquor—he never saw him so drunk but what he was able to stand: he thought he should never have been in a lunatic asylum for insanity or for anything else; that when he gets drink he gets a little excited, but his tendency is all for fun and witticisms. Four medical men practising in Cupar were examined as to Hain's state of mind. The first examined was Mr. J. M. Graham, surgeon: he had attended him upwards of six years ago when affected with delirium tremens, and he had signed a certificate of his insanity on one of the occasions when he was committed to an asylum. He had subsequently met Hain on the street with a gun in his hand, and, feeling alarmed because he had heard that Hain wanted to have a shot at him, he took the gun out of his hands while Hain was showing it to him, on which a struggle ensued, in which he (Graham) was severely injured. Mr. Graham was of opinion, from what he knew formerly of him, and from his conduct at his house in the middle of last August, that he is a furious lunatic; he considered his own life decidedly in danger from him. Although Mr. Graham was fully examined as to his opinion of Hain's state of mind, he was not strictly a medical witness; he had not been called on to visit him and converse with him, like the other medical men, immediately before the trial, because, as it appears, the petition against Hain was mainly founded on the violence he had shown in his house in the middle of August. On that occasion Mr. Graham had fortunately retired to his bed-room, and, though he heard Hain's outrageous language, he felt too much alarmed to show himself. The next medical man examined was Dr. Charles Grace. He had twice certified as to Hain's insanity, at the request of his relatives; first about six years ago, and again in January, 1849. Lastly, he had certified as to his insanity on the 30th of September and on the 2nd of October, after examining him by instructions from the public authorities. Dr. Grace considered Hain quite sober on the evening, in the middle of August, when he came to his house and made a disturbance. He walked quite steadily, and had no smell of liquor on him. Dr. Grace declared his opinion to be, that his madness is not caused by drinking, but that he drinks because he is mad; he would be exceedingly apprehensive of his own personal safety if Hain were at large. Mr. G. L. Bonnar, surgeon, was next examined; he had visited him four times since the 3rd of October. He considered his case to belong to moral insanity, the characteristics of which are, that the intellect may be quite correct, or nearly so, while the feelings and affections may be much perverted. Hain can decidedly distinguish right from wrong,—he could make a bargain for himself. When he (Dr. Bonnar) led the conversation, Hain spoke accurately enough; but, when it was left to himself, he rambled. Dr. Bonnar did not think that his insanity arose from drinking, but that it had been developed and aggravated by his habits of drinking. Dr. Wm. R. Mackie was then examined:—He had visited Hain six or seven times since he was apprehended. Dr. Mackie did not think he could distinguish right from wrong. He thought his case fell under oinomania, or that sort of insanity the character of which is, that the mind is unsound, and that the unsoundness is chiefly manifested by an irresistible craving for alcoholic fluids.

For the defence, two medical witnesses were examined, Professor Christison, of Edinburgh, and Dr. Skae, of the Edinburgh Asylum. Dr. Christison had held a conversation with Hain, and had partly read, partly heard, the depositions of the non-medical witnesses. It appeared to him, from his interview with Hain and from the evidence, that he has been for some time, though he cannot say how long, in a state of sanity, except while under the influence of liquor. He thought that, under the influence of liquor, Hain, owing to the peculiar constitution of his mind, was a person more readily disposed to become obstreperous and violent than the generality of persons in such circumstances. He said that moral insanity is described as an insanity of the moral feelings, independent of, and without injury to, the intellectual powers, but he had great doubts of the existence of any pure insanity of that description. He thought the practice of the Courts in Scotland, and the opinions of medical men generally, are averse to recognise any such insanity. So far as he was aware, no species of insanity has been recognised in our courts, where the party retains a clear perception of right and wrong. After considering all the evidence he was clearly of opinion that Hain had a clear perception of right and wrong, and that this has been the state of his mind for at least the last six weeks, when not under the influence of liquor. He said that oinomania is a convenient term for that species of insanity which consists in a propensity to drinking to excess, but that there must be more than such a propensity to constitute insanity, and that many will not allow that oinomania is more than a bad habit. In insanity there is essentially implied either hallucination or fatuity. He considered Hain not safe while under the influence of liquor, and somewhat more unsafe than the generality of persons so circumstanced, but that he considered every drunken man unsafe till he becomes helpless. Dr. Skae said, the conclusion he had arrived at was, that Hain was not insane at the present moment, and, so far as he was able to judge, had not been so for some weeks past. He said, there is a species of insanity in which the intellectual powers are not impaired, but the moral sentiments and feelings perverted. He believed that this sort of insanity had not been recognised by law, as protecting the patient from punishment. He said the term "oinomania" is employed by some writers to denote that state in which a person exhibits an uncontrollable desire for intoxicating liquors. He believed that this state had not been recognised by law as amounting to insanity. He said, that if Hain were sent to the Edinburgh Asylum, in his present state, he could not retain him unless with his own consent. He did not think that Hain was able to control his propensity to indulge in intoxicating liquors. He did not consider it safe to the community that Hain should go at large. He considered every drunken person to a certain extent dangerous to go at large, unless quite helpless. He would regard it as very advantageous if the law provided any means of control over habitual drunkards.

The Sheriff, with whom, by the Act under which the case was tried, lay the decision, founding on the evidence of Drs. Christison and Skae, refused the prayer of the petition, and Hain was set at liberty. The trial lasted for five days.

If this trial exhibits the real state of the law in regard to such cases, some new legislative enactment is imperatively demanded. There are multitudes in Scotland in the same condition with Hain, subject to become mad with liquor, and quickly returning to reason when it is withheld. The unhappiness caused in private by cases of this kind is incalculable, and there can be no doubt that out of such cases a great deal of crime arises. But surely such a state of things is incompatible with the very idea of a civilised community, as that there should be a multitude of people at large subject to an uncontrollable propensity, by the irresponsible indulgence of which at intervals they become temporarily mad, and capable of committing all manner of outrages and crimes, and yet that nothing can be done otherwise than illegally to discourage or restrain the indulgence of this propensity, except during the short time that the consequent madness lasts. People are deceived by the notion that all drunkenness is of this character, and, consequently, think that the evil is irremediable. It is, however, by no means true that every man is dangerous when drunk. Were this really the case, the effects of drunkenness in this country on the public

safety would be shocking beyond measure. There is really room for a species of insanity under the name of oinomania. If, as Dr. Skae says, the propensity in such cases as Hain's, be uncontrollable, why should we hesitate to consider it tantamount to insanity. Surely a man has lost his reason, when, instead of obeying reason, he must perforce yield to an uncontrollable impulse. Why might not the Legislature enact that a man shall be confined in an asylum for a year as often as it shall be proved that he habitually gives way to this uncontrollable propensity by which for the time he becomes mad? Without relying much on such a confinement as a means of cure, how many would find their propensity controllable with the fear of such a confinement before their eyes. This would be a truly moral method of prophylaxis against such cases.

But what a shocking thing it is to think, that after all that has been proved against Hain in this trial, he may execute the threat made so many years ago, and take a shot at Dr. Graham in his next paroxysm. Dr. Skae, though pronouncing him for the time sane, states his belief that it is not safe for him to be at large. Thus, though declared by law in a state of sanity now, if he succeeds in putting his threat in execution, and in one of his paroxysms kills a man for doing nothing more than his imperative duty, he will escape punishment by being found under the same law in a state at the moment which infers no responsibility!

IRELAND.

THE COLLEGES.

The storm we had anticipated has broken at length on the heads of the luckless opponents of the colleges, and it is something refreshing to hear Sir Robert Kane talking of "shams and delusions." The *Medical Times* has followed, with no little interest, in the wake of the different schools of medicine, surgery, and anatomy at these institutions; and we have only to repeat our opinion, that the opposition is most absurd, that the teachers of the medical department at Cork, Belfast, and Galway, are perhaps among some of the best in Ireland, and that anything now done to mar the usefulness of the schools would be very much to be regretted. The colleges, we need scarcely say, were mainly indebted for their origin to Sir Robert Peel, and have, for the past year, prosecuted their quiet and unobtrusive labours with no ordinary success. The students have entered at Cork, but in Galway the prospects are very gloomy. In Belfast matters are much better. The entrances are not yet all finished.

The President in his address, in allusion to the unmeaning opposition that had been offered to the colleges, referred to the equivalent establishments on the Continent, and stated, that neither the new educational law of France, a country so much given up to orthodoxies,—nor that of Belgium, (we must also agree with him in thinking, the most exclusively Roman Catholic country in Europe,) offers the same securities for religion and morality as those which have been accorded the Queen's Universities in Ireland. His appointment as President, Sir Robert Kane declares to have been wholly unsolicited by him; and, now that the schools are established, we must say it would be a piece of very great folly to close them. The students of the past year have been moral and well conducted; and it is not easy to see what religious observances have at all to do with test-tubes or lithotomy; the libraries of the different colleges bear a contrast with those of many ancient establishments; the museums, too, are growing up very creditably; and at Cork, thanks to the Earl of Clarendon, a special separate building for the professors of the medical faculty have been erected; the Visiting Board, appointed by delegation from Her Majesty the Queen; and, in point of fact, everything which our friends in the provinces have ever been praying for.

The President alluded, with more than his usual warmth, to the thraldom sought to be inflicted on education and science in Ireland. He very properly wished for no undeserved supremacy of creeds or class; no unearned rank; no class exclusion. Other enactments, as well observed, have given to every one his proper place as a citizen; and it seemed an opposition grounded on conscientious but mistaken principles, but, we would say, not at all on that account less mischievous.

Royal Sea-bathing Infirmary.—At the fifty-fifth anniversary of this charity, Alderman Gibbs stated, that the number of patients relieved by it had increased from 16 in 1796, when it was founded, to between 600 and 700 at the present time. Scrofulous complaints, which are of lamentable frequency among the poor, receive great benefit from the Infirmary. The Secretary, during the evening, announced subscriptions to the amount of 400*l*.

GENERAL CORRESPONDENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

"Nempe hæc assiduè; jam clarum mane fenestras
Intrat, et angustas extendit lumine rimas."—Pers.

[To the Editor of the Medical Times.]

Sir,—We live in stirring times. The age is practical,—the pace "prodigious." We have the rail and telegraph. Our bodies are transmitted now more quickly than our thoughts used to be; and our thoughts, as thoughts should be, "like lightning." There is no time for dawdling. Respect for rank and station is not, I trust, obsolete, or even impaired; but there is everywhere a disposition to examine the suppressed premise, as the logicians phrase it, which this feeling implies. If our Society be, as it has been said to be, like a barrel of our own beer, "top froth, bottom dregs, middle excellent," still, froth is going out of fashion, dregs are held to be unwholesome, if not dangerous, and the middle must be well worked to preserve its character. Everybody is doing something good or bad; and the time is coming, if it be not already arrived, when deeds will become the standard of everybody's position. "Move on," in fact, is the word; and in this respect learned societies are in no respect different from individuals, except as the density of the body. They will in fact be rated, move or move not, according to what they *do*. In one sense, then, or other, the greatest "do" in all learned societies is that which they publish to the world; it is put forth in the most emphatic manner; nor is it unadorned by rhetorical figure, the very name involving that which puts a part for the whole, and being "Transactions." I need scarcely say, that the volume thus designated is a very important feature in the Royal Medical and Chirurgical Society. The Society may be regarded as there quitting their snug domicile in Berner's-street,—as going forth in their "best bib and tucker," and arrayed in cloth and gold, to a small it may be, but still to a cosmical audience. To such an audience it is of no use to affect to apologise for their appearance, or to pretend that they are not responsible for their "statements, reasonings, or opinions," for they may be assured that it will be by these very things they will be judged. To quit metaphor, the Society sends forth the volume, recollect not as the whole, but as the *best*, of their collective contributions to the science of the world; and it is certain that the rank assigned to it will be regulated by the standard they have thus themselves supplied. I wish, therefore, Sir, to impress, that in every view of the matter, the "Transactions" must be regarded as the most serious part of their "doings." If that volume be unassailable, any little jobbings would pass, if not uncensured, at least uncared for, as mere parasites, which will adhere to higher organisations. If the volume be poor,—if, containing some good matter, it be still charged with an undue proportion of "inertia," so to speak; if it contain little or nothing of positive science, or little which visibly affords material for its prospective development, the Society must occupy a position with which no fellow, and, in the case of a chartered society, no Englishman, ought to be satisfied. Let us, then, Mr. Editor, examine the subject carefully, yet fearlessly, and see to what conclusions we are led by the facts of the case. Our first object will be to obtain some indication of the rank assigned to the volume, and this will proximately be suggested by the number of copies which are sold. We must recollect, on the one hand, that professional works do not sell like those of more general interest; but, on the other, we must not forget the volume is the *collectanea* of the *élite* of the contributions sent to a Society which enrols the names of many of the most eminent men in Great Britain; that it is published with all the *prestige* which is attached to the proceedings of a Royal Society; that the volume, in relation to price, size, paper, plates, &c., is seldom expensive, and, I believe, never dear. I fear that, with these advantages, it may excite some surprise when it is found that the proceeds of the volume, after giving to each resident fellow a copy, (a charge not exceeding one hundred pounds, more or less,) seldom pay the expenses of its publication. This surprise, too, seems to grow into astonishment when we reflect, that with a very moderate, if any, increase of *laborious* readers, there has been of late years a most unprecedented multiplication of those who indulge in works of moderately short discussions, of periodical issue. Again, it should be borne in mind, that the "Transactions" belong to a long list of progenitors, in the shape of thirty odd volumes, and these present an inducement beyond the intrinsic attraction of the current volume, not to make a work imperfect which can be kept complete by a small annual charge. This, indeed, seems as if there were something wrong, if not "rotten, in the state of Denmark." Is it

that the talent in the Society is not what I have assumed it to be? is it that fellows will not contribute, and is this from a pervading apathy, which affects them and them only; or is it that, in which the profession participate; or is it that the Council hold out repulsions on the one hand, whilst they withhold on the other inducements and elements of confidence such as reasonable men think necessary; such as justice demands, and such as the interests of the science, the profession, and the public, alike require? In considering these questions it will be necessary, first to state the progress of a paper:—It is usually sent to one of the two secretaries, who is "supposed" to peruse it. The paper is then read (not necessarily in the order of reception, but not often much otherwise) to the Society, by the Secretary, the *author not being allowed to read his own paper.* The reading (not always very distinct or audible) finished, the discussion, if any, comes next; this ended, the paper is next sent to two of a body of twenty-four, now thirty-six, referees, who are to examine and report their opinion as to the expediency of publishing it. The author *is known* to both referees, but *neither of them is ever known to the author.* The reports of the referees having been read to the Council, *to none of whom, save the President and Secretary, are the names disclosed,* the Council proceed to ballot on the question of the publication of the paper, assisted by the reports of two referees, of whose relation to the author and to the subject they are entirely uninformed. Now here, Sir, we begin to take courage. Hitherto all has been black and discouraging, but when we see the machinery by which the maximum of ability of a society is to be educed, and find it so full of defects as those which now crowd upon us, we are rather surprised that the Society should have kept any place at all, than that it should have not reached that elevated station which we might have anticipated, and which, I firmly believe, Sir, it is capable of doing. Whether I may be able to develope the true causes of the present state of things I know not, but I have little fear of being able to unfold a theory, which shall at least have one property of a true one, viz., that it is not an unreasonable explanation of the phenomena.

As this is too long an affair to commence in the present letter, I will merely add an incident I met with the other day on the railroad:—A portly rubicund old gentleman, whose waistcoat represented in Stultzian, several degrees of longitude, striving in vain with the exuberant latitude of his person, was bewailing the devious paths of legal and sanitary matters. He had several houses surrounded by an anti-sanitary cordon of bone-crushers, glue-makers, artificial guano-makers, &c. To use his own expression, he was resolved to run "full tilt" at them; so, arming himself with that double-edged instrument yclept law, he selected his victim in the shape of a bone-crusher, whose men had admitted, that at one period of the process they were obliged to quit the manufactory, and was just about to launch his first shot, when, all at once, he was brought to a stand. His lawyer came to him with a dismal face, having just "taken," as he said, what they call an "objection;" viz., that it would be impossible, amid such a multiplication of odours, to bring evidence that the particular odour came from the particular place. Thus my wealthy fellow-traveller was stopped by a sort of *evidentiæ copia;* by the very thing which, next to money, is most needful for going on in law. Now, Sir, as the mind will whisk away very unaccountably from one subject to another, it all at once occurred to me, that the difficulty in the question before us, was not so much to find out adequate causes for the alleged evils, as to assign to each its respective influence. But, as "*Pygmæi gigantum humeris impositi plusquam ipsi gigantes vident,*" so very little people may sometimes, by contemplating the difficulties of bigger folks, learn to obtain clearer views of their own. Whether I may have profited by the lesson I cannot tell, *mais nous verrous.*

I am, Sir, &c., SPECTATOR.

THE ARTERIES OF OLD PARR.

[To the Editor of the Medical Times.]

SIR,—I believe I did not say that the arteries of Parr "were mere cylinders of bone," but that they were converted into bone; and I spoke from the recollection of some published statements, which I think I shall be able to furnish your correspondent with, if he will favour me with his name and address. It is true, that in the account of the dissection in the "Philosophical Transactions" the arteries are not mentioned, but "J. D." is mistaken in supposing "that there is no other source of information besides the writings of Harvey." I have, in several instances, discovered parts of the radial arteries to be ossified cylinders in the *living* subject; and, as Parr was an object of great interest to many members of our profession, it is probable that some of them might have found his arteries in the same condition; and I will venture to assert, that the radial arteries are never ossified without the deposit being very abundant throughout the arterial system.

I think with your correspondent, that the College of Physicians would be a very appropriate place for the arteries of Old Parr, if they were in existence. I am, Sir, &c.,

21, Parliament-street, Nov. 4, 1850. EDWARDS CRISP.

IMPERMEABLE STRICTURES.

[To the Editor of the Medical Times.]

SIR,—In the last number of the *Medical Times*, Professor Lizars concludes some observations on the treatment of stricture of the urethra with this remark: "*I have heard the late Mr. Liston declare, that he had never failed in passing the catheter in stricture, and that he considered all other modes of treatment barbarous.*" I know, from conversation with several distinguished surgeons, that a similar impression is generally entertained; and it cannot be denied that Mr. Liston's published writings on the subject are somewhat obscure and ambiguous.

I am glad to have an opportunity of correcting a misapprehension regarding the opinion and practice of my late friend and teacher, and to relieve his memory from the imputation of vain-glory and presumption.

If he ever held the opinion above mentioned, it must have been at an early period of his practice,—before his reputation brought to him those obstinate cases of urethral obstruction, in the treatment of which he afterwards became so successful. Certain it is, that in the latter years of his life he was repeatedly foiled in the introduction of the catheter in ordinary stricture, and was obliged to have recourse to the operation described in his "Practical Surgery." He was too well acquainted with the pathology of the subject to deny the occurrence of "impervious" or "impermeable" stricture; he knew that his own, and almost every other good museum, contained specimens of perineal fistula and *total occlusion* of a part of the urethra consequent on ordinary stricture. Within these few days I have examined such an instance; and for a surgeon to deny their occasional occurrence seems to argue a want of experience; to say the least, it is fruitless and unbecoming in any one to claim infallibility in the use of the catheter for stricture. Mr. Liston certainly did not; and I have notes of four cases in which, after repeated unsuccessful attempts to introduce an instrument, he secured the patients as for lithotomy, and opened the urethra by an incision in the perinæum. In these four instances I was present, and assisted at the operation; but they were by no means the only ones he performed.

Speaking of the treatment of *retention of urine* from stricture, he says: "I have never yet been foiled in passing the catheter, though very many severe and difficult cases have fallen to my lot; yet circumstances may soon occur to me in which the introduction of an instrument along the urethra shall be impossible. No man, it has been said, can be always wise or always fortunate; and he who pretends to invariable success must be either a knave or a fool." Such circumstances did occur; for, not long before his death, I visited a gentleman with him who was labouring under retention of urine from stricture. Mr. Liston found it impossible to introduce a catheter more than an inch and a half into the urethra, and he was obliged to puncture the bladder through the rectum.

Thus, then, it will be seen that, notwithstanding his marvellous dexterity and success in the use of the catheter, Mr. Liston, whatever may have been his immature opinion, was led by mature consideration and ample experience to know that there have been and may be cases both of ordinary stricture and retention of urine from any cause, in which the introduction of a catheter is impossible, and for the cure of which other treatment is necessary; and I have no doubt that a similar experience will produce the same conviction in the mind of any surgeon who now holds a contrary opinion.

I am, Sir, &c.,

WILLIAM CADGE,
Assistant-Surgeon to University College Hospital.

October 31, 1850.

WOUND IN THE STOMACH.

[To the Editor of the Medical Times.]

SIR,—The following singular case I was called to treat lately. A few minutes past six o'clock on Tuesday evening, 17th inst., I was taken in all haste to the police barrack, to see James Gibbons, a constable, who had stabbed himself intentionally with his bayonet. I found him standing in a room with his breast open, as if in the

act of stripping off his clothes. His eyes were wild, and a tremor had seized his frame. A little to the left of the centre of the scrobiculus cordis there appeared the mark of a bayonet wound. He said he had pierced himself with his bayonet to the depth of 4½ inches. The weapon being examined, showed that it had been introduced fully to that extent. There was no external hæmorrhage worth mentioning, but he repeatedly declared that he felt the blood flowing down internally, and that he was sure he would not live an hour. I had him stripped and laid down in bed. He called incessantly for drink. In the space of an hour he got four or five seidlitz draughts, which he drank with the greatest greediness. Through the night he took ten such draughts, besides amazing quantities of cold water, strongly acidulated with sulphuric acid. He again and again declared that he was dying, and expressed the greatest anxiety to see a priest. One was obtained from Belfast.

Wednesday morning, at four o'clock, I visited him. He was tranquil, with a pulse which had fluctuated exceedingly in the first part of the night, soft, steady, and beating only 70 in a minute. I was informed that he had vomited much, and that his bowels had been greatly acted upon. I examined his evacuations, which were thin and bloody, leaving no doubt that the bayonet had pierced the stomach, from which the blood flowed. The most perfect rest, quiet, and total abstinence from food were recommended through the whole of this day and ensuing night, and on Thursday morning he said he felt astonishingly well. His thirst had greatly abated; pulse only 65, pain of wound not severe. He got for breakfast a cup of tea, about blood heat, without bread, and in the evening he had a little arrowroot. His bowels continued free.

Friday morning he assured me that he was without pain of any kind, and took for breakfast a cup of arrowroot. A similar quantity he took again in the evening. Saturday morning he said that he had rested well through the night and felt no pain. His bowels were sufficiently open. He wished to be permitted to be out of bed for some time, which I disallowed. I gave him liberty, however, to take a cup of gruel or arrowroot as often as he pleased.

Being assured, on Sunday morning, that nothing was the matter with him, and the wound appearing to be completely closed, I gave him permission to walk through his room, and prescribed no medicines whatever. Yesterday and to-day I visited him, and found him perfectly recovered.—I am, Sir, &c.,

G. Forsyth, M.D.,
Surgeon and Agent, Carrickfergus.

Carrickfergus, Sept. 24, 1850.

[We are obliged to Dr. Forsyth for this consisely-told and interesting case, which is an illustration of the rapidity with which lymph may be thrown out and organised so as to close an opening made in the abdominal viscera. Hyrtl saw an instance of a penetrating wound in the stomach, which healed in thirteen days. Wiseman records a similar case, in which the patient was able to walk about in seven days, as in the case above related. The case of St. Martin, the Canadian hunter, who, with a fistula in the stomach, the result of a wound from the accidental explosion of a gun, took service with Dr. Beaumont, and underwent a course of experiments, is well known to all. In many parts of Europe it is customary among the agriculturists to make an incision into the stomach of the cow, when great distension has ensued from eating unhealthy food (*tympanitis ventriculi.*) The cure is even yet more rapid than in man.

When a sharp instrument fairly enters the abdominal cavity, it is scarcely possible that the viscera can escape a wound; yet from early times it was remarked how rapid was recovery; and the not uncommon absence of any unfavourable symptoms induced Wiseman to fall into the error, that "it frequently happeneth that a sword passeth through the body without wounding any considerable part."—Ed. *Medical Times.*]

MEDICAL PROTECTION OFFICE.

In justice to Mr. O'Reilly, we insert the following communication, which we have received from his solicitor, Mr. Greaves Walker, in reference to certain statements contained in a letter signed "Philo," which appeared in our journal of last week:—

[To the Editor of the Medical Times.]

Sir,—My client, Mr. J. E. O'Reilly, has placed in my hands a copy of the *Medical Times* of Saturday last, Nov. 2, in which a letter signed "Philo" appears, of the publication of which he very reasonably complains. Mr. O'Reilly states, that he never had anything to do with the getting up or management of the "celebrated Mail Delivery Office," and that the imputation of fraud committed in the management of "Brearey's Office," and contemplated in the establishment of "another Medical Protection Office," has already caused him some loss, and subjected him to great annoyance and vexation, and is calculated to injure him most seriously, if allowed to remain unnoticed.—I am, Sir, &c.,

11, Beaufort-buildings, Strand, Greaves Walker.
Nov. 5, 1850.

[To the Editor of the Medical Times.]

Sir,—This office appears to be sending out its accounts; it has had the impudence to charge me 1*l.* 1*s.* from July last for the next year's subscription. As this doubtless has been done in many other cases, I think the profession should be made aware of the fact, that Mr. Brearey, of the Medical Protection Office Committee, has no right or title to make such a deduction. In the case of Luke *v.* Brearey, reported in your journal, it was decided that Mr. Brearey has no power to make the deduction, unless he has an agreement in writing from the party employing him to do so. I write to put the profession on their guard, for it is generally admitted that we have been sufficiently swindled already.

I am, Sir, &c., A Practitioner.

30th Oct., 1850.

THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

"We admit the charge. We *have* '*ventured*,' we *now* '*venture*,' and we *shall* '*venture*' to do our duty. Believing as we do, that the practice of homœopathy is totally without scientific basement, and that, being a 'FALSEHOOD' and a gigantic falsehood, it *must* be productive of a vast amount of harm to the human race, if its progress is unchecked."—(*Medical Times*, Oct. 19, 1850, p. 417.)

Sir,—Having read in your last week's journal, a letter supposed by its writer to be in support of homœopathy, one knows not whether to be more amused at its egotism, its bombastical arrogance, or at its total want of point and argument.

Its egotism is especially ludicrous: in that one letter, there are 132 references to self, and the first personal pronoun appears seventy-five times!

Although the writer is personally and by name unknown to me; yet as he, out of the plenitude of his advice to you, Mr. Editor, devotes one passing sentence to myself, and as you have admitted his letter, I presume that it may be taken for granted that the letter is not a hoax, but that it proceeded from a veritable "David Wilson, M.R.C.S., Edin."—the "friend" of "Dr. Charles J. B. Williams," "one of the surgeons to the Hahnemann Hospital," and who, in 1848, "enjoyed a very large and lucrative practice in Pimlico, which is still of sufficient extent to be carried on by *two* successors with *equal* success." Of course this "large general routine practice" was a pure or prescribing practice; for we cannot suppose that Mr. Wilson, who so conscientiously gave it up on account of homœopathy, could possibly practise as an apothecary without an apothecary's licence.

In an editorial note to Mr. Wilson's former letter, there seems to have been one expression which has given deep offence; for in his last, Mr. Wilson particularly hopes that, judging from his arguments, you will not be led to consider *him* as a "madman" or a "knave." You, Mr. Editor, omitted to gratify Mr. Wilson's anticipated hope, for you only gave your verdict as to the acquittal of Hahnemann of knavery—of which a few words immediately. Now, with respect to Mr. Wilson, such an acquittal would be just, and would likely be admitted by most of your readers. In reference, however, to the *other* charge, if it had been dressed in a more lenient garb, a Scotch jury would, in all probability, have returned a verdict of "not proven," which verdict is peculiar to Scottish law, and intermediating between "guilty" and "not guilty," gives the accused the benefit of the doubt without a free acquittal.

The reverse of this verdict belongs in justice to Hahnemann, who, for gain, and long before he concocted his homœopathic theory, sold to a credulous German public a quack nostrum for the cure of all diseases, which nostrum Hahnemann made himself, and knew that thereby he was deluding the people.

But this event in the history of Hahnemann leads to the supposition, if not certainty, that upon this deceptious nostrum-foundation arose afterwards that greater superstructure of fraud and folly called homœopathy, and now the idol of a certain class of minds.

When any one faculty of the human mind predominates to the

overbalancing of the judgment, monomania is said to result. When, therefore, excessive self-esteem is in combination with deficient reasoning powers, we may expect to find displayed a morbidly overweening vanity; and the fruits of this unbounded arrogance will present themselves in such sentences as the following:—"Let *me*, Sir, seriously commend to your attention the introduction to Hahnemann's 'Organon;' and *I* would recommend to your notice Dr. Dudgeon's recent translation. If you should rise dissatisfied, *I* will undertake to answer you. *I* promise to direct you further in the path that will lead to truth." "*I* am not at all surprised that *you* (!!!) should have fallen into error in many points connected with the homœopathic law, and which *I* have no doubt you will discover and acknowledge on finishing the course of reading *I* have recommended."

The *course of reading* recommended by Mr. Wilson to you, Sir, and also to myself, is Hahnemann's "Organon!" a work which we have read, I doubt not, more than once, and that, too, long before Mr. Wilson had retired from Pimlico; allusion to which place, however, urges forward to an examination of Mr. Wilson's reasons for leaving his large practice there.

In giving these reasons Mr. Wilsou honestly confesses to an amazing amount of failure in his "general routine practice;" but, as he explains, having "received the first rudiments of his medical education in the University of Edinburgh," he (from 1829 to 1848) treated all homœopathic "lessons with utter contempt;" nay, he states, that he even went the length of writing an "article against them." It is to be hoped that Mr. Wilson will favour the public with the when and the whereabouts of this "article," so that it may be placed on anti-homœopathic record.

Mr. Wilson's failures in regular practice appear to have been the negative cause of his perversion. The positive, or chief cause, however, was, that in process of time the Pimlico practice caused Mr. Wilson's health to suffer—a very likely result of so much failure—and he appears to have consulted everybody, and to have taken everything that everybody prescribed, for he says, "All sorts of medicines were prescribed for me, which I credulously swallowed." At this crisis, Mr. Wilson fortunately met with a hydropath, who very sensibly recommended *no more physic*, but "some very simple hygienic means," "under which," adds Mr. Wilson, "I soon improved, and was able to continue my practice."

The recovery of Mr. Wilson's health—by hygienic means—*without the use of medicines*, first *induced him to look with favour upon homœopathy*. Had Mr. Wilson argued upon this fact like a rational being, and seen the necessary sequence of the premises, he would forever afterwards have forsworn systems of medicine of all kinds, and he would, by so doing, have acted in honest keeping with his conscientious belief; or, had he taken up homœopathy as the instrument only by which he might evade the administration of physic, as many do, by the apportioning out to his duped patients, morning, noon, and night, the placebo-globules, the medicated (?) sugar of milk, the "attenuated" drop, then, though less conscientious, but more argumentative, he might have claimed a niche beside the late Mr. "Morison" or the renowned "Old Parr."

Oh what a lesson this ought to be, not only to Mr. David Wilson and the homœopathic clique generally, but to those of our own ranks also, who, like Mr. Wilson when in Pimlico, are ever inundating their patients with physic. We are all taught, by Mr. Wilson's case, that many cures may be effected by the most simple hygienic means, and not, as is too often thought, on the one hand, by constant physicking; or, on the other, by the inane nothings prescribed by homœopaths. Medicines were given to us to be used, but not abused, nor disused.

The hygienic recovery of Mr. Wilson's health excited within him revolutionary ideas, and he became a radical in medicine; whereupon he "sat down and read *everything* that came in his way," and soon the "homœopathic law" shone forth before his "wavering mind," as full of truth and comprehensiveness. He then had "two years' hard reading;" and four years of experimentation, he states, expired before he avowed adhesion to the homœopaths; so that it would appear that many of his 12,000 vaunted practical (?) observations were made upon his unsuspecting and confiding patients during the period that he professed to practise regularly in Pimlico. Be this as it may, Mr. Wilson says, that he *did* make himself "thoroughly" acquainted with the principles" of homœopathy. Now, as, since the period alluded to, Mr. Wilson has been engaged in homœopathic practice, we may presume that the principles by which he practises will be *now* more impressed upon his mind than when he first believed, even although "thoroughly acquainted" with those principles *then*. Mr. Wilson may be looked upon, therefore, as an able, if not *the* most able, expositor of the first great or leading "homœopathic law" or principle—"*similia similibus curantur*."

As Mr. Wilson denies to every one else who, from reading, practice, and conviction, rejects homœopathy as a folly or a fraud, the possible capability of understanding Hahnemann's meaning of the simple dogma, "like cures like," it would naturally be expected that Mr. Wilson would have kindly afforded to us the advantages of his own extensive homœopathic reading and experience; but we look in vain for Mr. Wilson's explanation. He accuses *you* of not understanding the "homœopathic law," and he accuses also Dr. C. J. B. Williams of like ignorance of it, because that able man exposes the hollowness of homœopathy in his "Principles of Medicine;" who, when treating of the dogma "*similia similibus medentur*," asks sarcastically, "who cannot fail to admire the expansive genius of Hahnemann, who discovered that the best cure for a disease is the influence which caused it?"

But when Mr. Wilson so recklessly accuses of ignorance men of acknowledged attainments, he as carefully evades all explanation himself, although, by his former vain promise to explain, he obtained from you an honourable pledge to admit his letter into your valuable pages. He now shifts from the plain question, "*What do you mean, Mr. Wilson, by the homœopathic law, "similia similibus curantur?*" and he shamelessly confesses that neither *he* nor *Hahnemann* meant anything at all! They care not one iota about the physiological investigation of the "how, or in what manner medicines act!" whilst they can only in unmeaning parrot like prattle vociferate, "like cures like!" This often-repeated "principle" of this dogmatic and false system of medicine is denied by all sound and reflecting physiologists and physicians.

Allow me, before I close upon this point, to quote briefly from a former letter, (*Medical Times*, July 6, 1850, p. 23,) as I am anxious to receive all truthful information upon the subject referred to. "Assertions the most unscrupulous are made by homœopaths, and it would seem that the more startling they are, the more readily do some minds receive them, and it might be well, if occasionally some one would take the trouble of exposing their falsities; for, remaining uncontradicted, they assume to the inexperienced the form of truth."

"In *Jahr's* 'Manual of Homœopathic Medicine,' under the heading 'Iodium,' amongst the innumerable symptoms *said* to be produced by iodine, we find more particularly noted, by being placed in *italics*, '*hard and large goitres.*' Now, after much experience in the administration of iodine, in small doses and in large, from the shortest period of time to the longest, *I defy the medical world to produce one authentic case of goitre caused by the use of iodine.*" If their dogma were founded in nature this could be proved at once; but, as soon may a drop of any acid, or of the same acid, by admixture with a gallon of sulphuric acid, be expected to transmute that acid to an alkali,—as soon may a red-hot cinder, if thrown into a burning furnace, be expected to extinguish its fires,—as soon may the flickering flame of a taper, if held up to the sun, be expected to produce darkness, as that the dreamy lucubrations of the homœopath can ever eclipse the truths of inductive science.

In concluding his letter, Mr. Wilson indulges in a little sarcastic wit. He facetiously challenges the hospitals of London to single combat, and upon the result stakes his own fair fame and the merits of homœopathy. Of course Mr. Wilson was aware that the first and best physicians of a neighbouring country had met in commission long since, and had decided against the claims of that fond folly. But the dry attempt at jestive humour semi-hidden in this challenge, must not lead to the entire overlooking of a display of ignorance and arrogance which ill accords with an "Edinburgh medical education," even in 1829—for Edinburgh then was famous as a chemical school.

"You seem," says Mr. Wilson, addressing you, Mr. Editor, "to be further astonished by the fact, that dividing the dose increases the power, or that causes produce effects *inversely* as their quantity. A knowledge of Hahnemann's doctrine would have prevented your falling into this error"!!! Then, as a result of his own knowledge of "Hahnemann's doctrine," Mr. Wilson adduces, as an example of that "law," the fact, that *metallic* mercury may be taken in almost any quantity into the stomach with impunity, whilst a small portion of it, *when "triturated* with some *inert* powder, becomes immediately active"! Mr. David Wilson, of course, never takes into consideration the chemical *change*,—the oxidation of the mercury; he evidently looks upon its new activity as the result of its minute division by trituration.

You have also, Sir, sufficiently exposed his other error, with respect to oxalic acid. It is to be wondered at, that, in these days of poisoning, Mr. Wilson had not rather chosen, as an example, arsenic, as even that poison has been taken into the stomach in a mass with impunity, having received in the stomach, by a process of nature, through irritation, an impervious coating, whilst a very

small quantity of that poison in powder, or in solution, would have done its work more surely — and why? Not, certainly, by "increasing its *power to do good*," but simply because that small portion was sufficient to poison.

This observation leads at last to the only point left in Mr. Wilson's letter worth noticing, viz., the "infinitesimal doses" of the homœopaths; but here, too, he tries to evade the question by a quibble, in like manner as we found him coquetting about the first or principal Hahnemannic dogma. As the most able expositor of Hahnemannic doctrines, Mr. Wilson *now* represents the great founder of the system to have meant nothing more by the excitation of substances, by trituration, dilution, division, shaking, and the like, than *merely* the increasing of the *power*—not the strength, but only the "power or influence of doing good!" But Mr. Wilson forgets what he has just stated relative to the *activity* of mercury by trituration. He seems to have forgotten, also, that he had just adduced oxalic acid, to prove that a *diminished* dose of a medicine was, if not more, at all events, equally *active* with a large dose; and he called upon "Drs. Christison and Coindet" as his witnesses, because they have stated, with respect to "*the action* of oxalic acid," that "dilution has nearly *the same effect* as increase of quantity." So much, then, for the consistency of Mr. David Wilson's arguments.

As the "influence of doing good" was not in Mr. Wilson's own personal case the result of the administration of any medicine at all; so, in all cures under homœopathic treatment, the "influence of doing good" will be found, if carefully examined, to have arisen from a similar cause, viz., *natural*, or "*hygienic means*," and not from the fancied virtues of the homœopathic globule.

Begging indulgence for having occupied so large a space in your valuable journal upon a question of perhaps little interest to many of your readers. I remain, Sir, &c., JAMES INGLIS, M.D.

Halifax, Nov. 5th, 1850.

OXFORD SANITARY REPORTS.

[To the Editor of the Medical Times.]

SIR,—Well aware as I am of your earnest desire to accord to all in the profession the merit that is their own, I was well pleased to see, in a late number of your Journal, the notice taken of the "Monthly Reports of the Mortality and Public Health of Oxford," and the terms of praise that were meted out to *one* of the gentlemen who so meritoriously, and with so much labour, have and are collating *matériel* for these valuable reports. But I feel, Sir, assured that you will not only pardon, but thank me for calling your attention to what has been the subject of remark in this city, *i.e.*, that you have unwittingly rendered an injustice to another gentleman of the profession, by a total *omission* of his name, or his share in these reports.

Mr. Allen, the late officer of the Board of Health of the Cholera Hospital of Oxford, is the gentleman to whom I allude, and I do so with more satisfaction, as I am well convinced that the only reason which has prevented his coadjutor from correcting you, and at the same time expressing the value he places on Mr. Allen's aid and statistical knowledge of the cholera, is the extreme repugnance to a journal notoricty by the gentleman you have already honourably made mention of. I am, Sir, &c., OXON.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. James Risdon Bennett exhibited a specimen of cancerous disease of the omentum, mesentery, pleura, &c.

A man, aged 60, of temperate habits, and who had enjoyed good health, was admitted into St. Thomas's Hospital under his care, with symptoms of ascites, and a chronic ill-conditioned ulcer involving the ball of the great toe. He died five weeks after his admission, having suffered chiefly from dyspnœa when in the recumbent posture.

On examination, the abdominal cavity was found distended, partly by serous effusions, but chiefly by a large floating mass consisting of the enlarged omentum. The mass had a lobulated character, and consisted of smaller masses, the separate portions of which had at first sight very much the appearance of fatty nodules, resembling the appendices epiploïcæ; but on cutting into them they presented a medullary appearance and consistence, and, when examined under the microscope, were found to be composed of globular distinctly nucleated cells, intermingled with fatty matter.

The mesentery was similarly affected throughout. The right pleural cavity was filled with clear serous fluid, by which the whole lung was compressed against the spine. Scattered over the serous membrane, there were a number of small, greyish, lymph-like masses, which on examination were found to be of precisely the same character as the clustered masses in the abdomen. The bronchial glands and the tissue of the lung itself were healthy, and the left pleural cavity presented nothing abnormal. The liver was somewhat enlarged, and of a pale waxy appearance. The disease of the toe appeared to be also cancerous; and, if this was the origin of the disease, it was worthy of remark that none of the abdominal glands were much if at all involved in the disease.

Mr. Cæsar Hawkins related a case of strumous disease of the os calcis of the femur and cranium, resembling malignant growths, and exhibited two preparations from it of necrosis of the os calcis, in which the dead bone, infiltrated with pus, was still entirely connected with the living bone, although the disease had commenced eight years previous to its removal by amputation; the joints between the astragalus and the os calcis were partially anchylosed, and, although the astragalus itself was quite healthy, the joint between the astragalus and the tibia showed the commencement of ulceration of the cartilages, demonstrating, as Mr. Hawkins remarked, the manner in which the inflammation of the soft parts sometimes conveyed disease from one tarsal or carpal joint to another, making the removal of pieces of necrosed bone, or the excision of even an entire bone, not always successful. The case was remarkable, however, more from its history, as illustrative of the difficulty occasionally observed in distinguishing between simply scrofulous disease and malignant affections. The patient, a young woman, was admitted into St. George's Hospital with a large phagedænic ulcer of the inside of the ankle, excessively painful, and requiring large quantities of opium for its relief, with much thickening of the soft parts, looking in the sections not unlike scirrhus, and having in the centre some warty granulations resembling the cancer of cicatrices, (of which Mr. Hawkins has written a description,) in the centre of which the probe passed down into the joint between the astragalus and os calcis, without touching dead bone. After some attempts to heal these parts amputation was proposed, but declined by the patient. After a few months a mass of glands formed low down in the groin, as large as an orange, as if enlarged by the contamination from the apparent cancer below, which did not suppurate like strumous glands, but which sloughed gradually away after previous ulceration of the skin; and as some were destroyed, fresh masses formed by their side, which went through the same process of sloughing during two or three months. About the same time there formed, at the lower part of the femur, on its inside, a firm elastic tumour, obviously connected with the periosteum, but without bony deposit, about four inches in length, and perhaps two inches in height, and soon after this a growth took place on the left side of the frontal bone, soft in the centre, and consisting apparently of a morbid growth in the diploë, making its way by pushing out the outer table with a little absorption of the bone in the centre. Thus was formed a continuation of appearances in every respect seeming to confirm the supposition of the malignant nature of the original disease, and quite sufficient to deter Mr. Hawkins from operation, which the woman was now desirous of. In two or three months more, however, and, as it seemed, chiefly from the use of iodide of potassium and sarsaparilla, all these latter growths disappeared, the tumour of the thigh gradually subsided, the glandular masses all sloughed out, and the part healed; the growth of the diploë went away, the bone recovered its former level, and the skin recovered from the sallow complexion it had assumed, and amputation was performed. The patient was quite well a year-and-a-half afterwards, and it is presumed, therefore, that the deceptive growth of the femur and cranium and glands could not have been malignant, and perhaps not also the morbid texture in the ulcer of the foot. It seemed, therefore, not undeserving of the attention of the Society, in conjunction with the case about to be related by Mr. Hewett, in which a similar

difficulty of diagnosis existed as to the strumous or malignant nature of the disease.

Mr. Prescott Hewett presented a specimen of crude tubercle in the medullary cavity of the femur, an affection which he considered to be a very rare one, more particularly in this country.

The preparation was taken from a man of about 30 years of age, who was admitted into St. George's Hospital a few years back, with a tumour situated at the union of the middle to the lower third of the thigh, a careful examination of which proved that the disease was intimately connected with the bone, apparently springing from it, and occupying the greater part of its circumference. Somewhat globular in shape, this tumour was unyielding in its nature, but not painful when handled; its surface was generally smooth, and the circumference of the affected bone was larger in this part by two inches than that of the opposite one. The patient reported that, fifteen months previous to his admission into the hospital, he had, for the first time, begun to suffer considerable pain in the bone, of a shooting character, which deprived him of rest. Three months after this, the swelling made its appearance and gradually increased in size; at this time he also suffered from swelling and induration of the testicles, but this subsided, and then recurred once or twice, leaving the right testicle and chord somewhat enlarged and hard. His health had begun to fail about seven months after he was first attacked, and the pain in the thigh had, with few intermissions, been continual and of a severe character. The countenance, which was anxious and sunken, was sallow; there was little or no appetite, and the general health was much broken. The prevalent opinion was, that in all probability the disease about the thigh was of a malignant nature. No operation was proposed, the aspect of the case being too unfavourable. The patient was put upon sarsaparilla, and blue ointment was applied to the testis. In a few days the gums were affected; the countenance became very anxious, and the skin slightly jaundiced. He also now complained, for the first time, of great pain in the right hypochondriac region, where the liver was found to be much larger than usual, hard, and very tender. Blisters were applied to the abdomen; the mercury was left off, and hydriodate of potash was ordered with the sarsaparilla. Under this treatment the general health began to improve; the hardness and swelling of the testis gradually disappeared, and in some little time the tumour of the thigh, when measured, was found to be less by an inch. These favourable symptoms continued steadily, and in a few months the man was made an out-patient; the hepatic symptoms being at that time but slightly marked, and the thigh presenting merely some general thickening of the bone at the part which had been affected. He was re-admitted the following year into the physician's ward, for ascites, and while there was attacked with erysipelas, of which he died.

At the *post-mortem* examination extensive deposits of tubercular matter were found under the peritoneal covering of the right lobe of the liver, as well as in numerous parts of the subperitoneal cellular tissue generally. Similar deposits existed also in the structure of the kidneys, spleen, and lungs. On examining the parts which had been involved in the disease of the thigh, great thickening and condensation were observed about the cellular tissue uniting the muscles, and in that between the muscles and the bone; the periosteum, which was also very much thickened, presented on its free surface a large patch of tubercular matter, enveloped in a dense cyst. The bone itself was irregular in shape, much hypertrophied, and very hard; at this part its medullary cavity was filled with tubercular matter, surrounded by gray semitransparent lymph, presenting very much the appearance of the well-known granule of the lung. No other bones were examined.

In addition to the rare occurrence of crude tubercle in bone, Mr. Hewett thought that the history of this case afforded a very good illustration of the great difficulties connected with the diagnosis of tumours affecting the osseous system. The more marked symptoms of the case certainly led to the supposition that the disease was of a carcinomatous nature; but this opinion was proved to be erroneous by the disappearance of the tumour, which in all probability had been formed, for the greater part, by lymph effused around the tubercular matter found in the cellular tissue between the bone and the muscles.

Mr. Arnott exhibited a specimen of fracture of the spinous process of the axis, with depression of the separated portion, death occurring one hour after the accident.

A man, aged 74, was admitted into the University Hospital, July 13th, 1850. He had for many years suffered much from pains in the head, and for which at different times he had been a patient of the hospital. They were described as most violent, recurring periodically, and were most relieved by incisions in the scalp, quinine, &c., being given without benefit. Twice he had suffered from symptoms of acute mania.

The day of the accident he had been occupied upon business of an anxious nature. On his return home he complained of feeling giddy, and immediatcly afterwards, on descending the stairs to the kitchen, he fell down to the bottom of the flight; when taken up was senseless and motionless, but soon recovered sufficiently to speak. He was admitted for this into the hospital, about forty minutes after the accident.

He complained of pain in the back of the head, on which was found a wound about half an inch in length, and to its left a contusion of the scalp. No fissure was detected in the bone below the wound. He was sensible, but knew nothing of the accident; said he could not move his arms, and wished to be raised up; when either arm was raised for him it dropped immediately, and he complained of no pain in them when pinched. He could move his lower extremities when required, with facility.

Right pupil moderately dilated but acted freely; left eye diseased; pulse 90; breathing quiet, surface of body warm; complained of cold hands and feet, and desired them to be rubbed, though they were as warm as other parts of the body.

Blood in small quantities escaped from the mouth, which was not accounted for.

Soon after admission, it became evident he was sinking; and he died twenty minutes after he came in.

Post-mortem Examination.—No fracture of the skull; calvarium very thick and dense.

Dura Mater.—Near the longitudinal sinus at the posterior portion were a few opaque patches; glandulæ Pacchioni not well marked; meningeal veins less turgid than usual. On dividing dura mater on left side, about ʒss. of sero-sanguineous fluid escaped; the same on right side, though less in quantity. The under surface of dura mater pale, and covered with a layer of apparently recent lymph; on the left side the membrane was found much thickened over the lateral region, about two lines in thickness, extending apparently about one inch. This thickened part is divisible into two layers: the outer one of the thickness and consistence of the dura mater in other parts; the inner being thicker, of fibro-cartilaginous consistence, and above continuous with the arachnoid, where the opacity and thickness subside. Near the longitudinal fissure, thin adhesions extend between the two layers of arachnoid. Longitudinal sinus contained a small clot posteriorly, and ʒss. of dark fluid blood. Pia mater presented much fine ramiform and capilliform injection; the larger venous trunks rather turgid. On removing membrane from left hemisphere, a small quantity of serum exuded; surface of brain presenting various amounts of punctiform injection; veins of medulla congested; ventricles empty; choroid plexus pale; commissura mollis absent; fornix a little softer than natural. Weight of brain, 46 oz.; cerebellum, 5½ oz.

Neck.—On cutting down upon the cervical vertebræ, much blood was found extravasated between the muscles, especially between the complexus muscles. On reaching the vertebræ, the spinous process of the axis was found broken off, with a portion of its laminæ, the posterior arch remaining entire. The broken-off spinous process is much depressed below the others, and wedged in between the arches of the axis and the vertebræ below it; possibly it had pressed on the cord, but, though the fractured edge nearest the cord was sharp, it had not injured the dura mater.

The canal being exposed, by the removal of the arches of the vertebræ, a considerably quantity of dark fluid blood escaped from the canal, and, as low as the sixth dorsal vertebræ, blood was effused into the cellular tissue outside the dura mater; around the origin of the nerves to the upper limb, the amount is greater than elsewhere—the greatest being above the enlargement of the cord from whence these

nerves are given off. The articulations between the axis and third cervical vertebræ are very loose.

Dr. Peacock exhibited two specimens of disease of the heart.

One of these was an example of extensive aortic valvular disease. The specimen was from a boy, 18 years of age, who had been ill for nearly two years, and during a considerable part of that time had been a patient of Dr. Peacock's at the City Hospital for Diseases of the Chest. His illness was brought on by a sudden mental impression, which produced a fit, and was followed by symptoms of cardiac disease. In addition to the usual asthmatic symptoms, a loud murmur was heard with the systole of the heart, and this was followed by a feeble diastolic murmur. The murmur was most distinctly audible at the base of the heart, along the course of the upper part of the sternum, and on the right of that bone, and it was accompanied by a purring tremor, felt chiefly between the third and second and the second and first right cartilages. The cardiac dulness, on percussion, was very greatly extended beyond its normal limits. The boy continued to be subject to fits of an epileptic character at intervals of two or three months, and he died suddenly. He had never had rheumatic fever, or any other serious disease, before his seizure. On examination, the heart was found of very large size, weighing 28 oz. avoirdupois. The hypertrophy and dilatation were very much confined to the left ventricle. The aortic valves, and especially the left and posterior folds, were extensively adherent at their angles of attachment and sides, and they were also much thickened and indurated, so as to lessen the capacity of the aortic orifice. The anterior valve was studded with cretaceous vegetation, and was broken down so completely as to have an aperture admitting the point of the little finger, by which a column of fluid freely regurgitated into the ventricle from the aorta. The aorta was much dilated in its ascending portion. The ventricular walls had undergone, in places, the fatty degeneration, and a small piece of bone was attached to the endocardium, not far from the apex. The cavity at the apex was much expanded, and the walls were there very thin, and the endocardium much indurated.

The second case was one of very advanced mitral valvular disease, removed from the body of a female, 39 years of age, who had suffered from two attacks of rheumatic fever within the last ten years. She had been subject to palpitation and dyspnœa since the first attack, and had twice been a patient at the City Hospital for Diseases of the Chest. She presented the usual symptoms of cardiac disease, and a loud murmur was heard with the systole of the ventricle, most intensely at the apex, and thence towards the left axilla. On examination, the heart was found larger, weighing 15¾ ounces. The left auriculo-ventricular aperture was contracted to a mere chink, scarcely more than half an inch in length, and the folds of the mitral valve were thickened and rigid, and the cords much shortened.

Mr. Toynbee exhibited a specimen of molluscum contagiosum, developed in the external auditory meatus.

The specimen was taken from a man aged 67, and the existence of the disease had not been observed during life. The tumour was about the size of a small nut, and occupied the posterior surface of the outer part of the meatus. The outer surface was of a pearl-white colour and shining. Upon being opened, the interior was found to consist entirely of epidermoid scales. The tumour projected backwards, had caused absorption of the layer of bone separating the mastoid cells from the meatus, and occupied a considerable portion of the mastoid cells.

Mr. Avery presented a specimen of strangulated femoral hernia, reduced *en masse*.

The preparation was taken from the body of a woman, aged 60, who was brought into the Charing-cross Hospital on the 1st of September, 1850. Mr. Aveny was absent from town when she was admitted, and did not see the case till the *post-mortem* examination. Three days before her admission she had been seized with well-marked symptoms of strangulated femoral hernia, and was seen by a very intelligent practitioner, who persevered with the taxis until the swelling disappeared from the groin. He thought he had succeeded in returning the bowel safely into the abdomen, and the symptoms were considerably relieved at the time, and a free evacuation was procured by the aid of aperient medicines. Some few hours after, however, the pain and vomiting returned, and continued so obstinately that she was sent to the hospital. There she was treated with calomel and opium, and had leeches and fomentations, &c., applied to the abdomen. She gradually sank on the fifth day after her admission, passing from time to time fæcal evacuations, which circumstance prevented any explorative operation being had recourse to to ascertain the condition of the hernial sac. On examination, the hernial sac, as large as a walnut, and containing a portion of small intestine firmly grasped by the neck, was found fairly pushed up, *en masse*, through the crural ring, and lay in the loose cellular tissues between that opening and the peritoneum. The neck of the sac did not embrace the entire circumference of the gut, which was proved by passing a director, with care, close to the mesentery, from the portion of intestine above the stricture into the portion below it. This latter circumstance accounted for the continuance of fæcal evacuations, and deprived the poor woman of a fair chance which might have been afforded her by an explorative operation. Two or three inches of gut below the stricture were very dark, and bore the marks of constriction, and had been clearly contained in the sac a short time previously, probably liberated at the time the sac was returned into the belly. At the bend of the thigh, in the situation the sac had occupied, there remained the condensed cellular and adipose covering so well described by Mr. Luke, from which the sac had been separated. It was loose and flabby, as large as the end of the thumb, and had the appearance as if the hernial sac was still there.

Mr. Luke, in his paper, has described five cases of reduction *en masse*, which he had seen; and my colleague, Mr. Hancock, has mentioned, in a recent work on hernia, that out of 84 cases where the bowel was returned unsuccessfully 44 were of this character. It offers another instance where the operation external to the sac would probably have failed. There was slight effusion into the cavity of the peritoneum, but the marks of peritonitis and injury to the coats of the bowel were not considerable, and she seems to have sunk from exhaustion.

Dr. Beith, R.N., presented a very interesting specimen of diseased bladder and dilated ureter, with calculi impacted in the latter.

A man, aged 53, had an attack of hæmiplegia sixteen years ago, from which he had never perfectly recovered. Three or four years ago he suffered from stricture of the urethra, for which he applied for relief; and in May last was attacked with hæmaturia, and passing pus in the urine. Since that time has suffered almost constant pain in the hypogastrium and perinæum, which occasionally assumed a violent paroxysmal form, accompanied with difficult and painful micturition. The urine alkaline, and loaded with pus and mucus, occasionally blood. He died October 10th, having been in no way relieved by treatment.

Post-mortem Examination.—The right kidney was converted into a large cyst, four or five times the size of the healthy organ. It was filled with thick green fluid; from it was a large opening passing down to the ureter. This latter tube was also considerably dilated, and its coats much thickened; its lower opening into the bladder was entirely obliterated, so that the contents of the cyst and the ureter could not escape. The inner surface of both the cyst and the ureter was rendered uneven and irregular by numerous bands passing round portions of the walls, and constricting the cavities at these points; in the ureter, this occurred to such an extent, that it might be said to be divided into several compartments, one above the other. In the compartments three calculi were found embedded, the largest of which occupied its superior third, and was about three inches long and three-quarters of an inch in diameter. The left kidney was almost three times the natural size, but healthy in structure. The coats of the bladder were much thickened, and its cavity considerably smaller than usual; its inner surface was studded with phosphatic deposit, and near its fundus was a fungoid mass as large as the palm of the hand. Examined microscopically, this mass was found to consist of triangular, oval, and other cells of a very irregular shape, resembling those found in malignant disease. The cerebellum presented a singular appearance; it was tough and indurated, and appeared to have been converted into a fibrous structure. The whole had a uniform straw-colour, the appearance of the arbor vitæ being nearly obliterated. The brain otherwise was healthy.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

Saturday, November 1, 1850.

DR. BENNETT, President, in the Chair.

Dr. Webster, F.R.S., read a paper on the "Health of London during the Six Months terminating September 28th, 1850."

Approval having been expressed of the author's previous reports, he was induced to resume so important a subject, especially as the health of London had been recently very satisfactory, compared with ordinary seasons; but still more so, when contrasted with last year. Thus, during the six months terminating the 28th of Sept., 22,816 persons have died in London, instead of 40,117 in the parallel season of 1849, being a diminution of 17,301 deaths, or 43·12 per cent. in favour of the present, compared with the former period. This great difference is chiefly owing to the very diminished mortality by cholera; only 96 individuals having died from that cause, instead of 13,115 during the same months of last year. Diarrhœa and dysentery have likewise proved less fatal; the deaths by those maladies being 1,459, instead of 2,946 in the same six months of 1849. Measles, scarlatina, and hooping-cough, have also prevailed less severely than previously. Besides these complaints, typhus, which, in the second and third quarters of 1849, caused death to 1,222 individuals, was fatal in only 900 during the past six months. Phthisis, pneumonia, and bronchitis also come within this category; likewise convulsions and erysipelas; 168 patients having died of the latter disease during the recent season, instead of 213 in the same six months in 1849. Nothwithstanding the diminished total mortality in London during the period embraced in the author's report, several complaints have exhibited an increased fatality. Among those, influenza and cancer were mentioned; as also insanity, hepatitis, and ovarian dropsy. By the latter disease, 35 females are reported to have died from the 30th of March last to the 28th of September; whereas only 20 fatal cases from the same cause, were met with during the parallel six months of 1849. Several maladies, on the other haud, have exhibited nearly the same rate of mortality as in the previous season. Thus, 67 persons died by Bright's disease, during the last six months, against 65 in the parallel period of 1849. From puerperal diseases, again, 200 fatal cases were recently recorded, in contradistinction to 210 during the same two quarters of last year. The author then alluded to apoplexy, hernia, and delirium tremens, by which latter serious complaint 96 persons died recently; whilst the number of deaths from the same cause, was 94 in the former year. After various remarks upon several points of much interest, Dr. Webster alluded to the great mortality among children shown by the fact, that of the total 22,816 deaths recorded in the metropolis during the last six months, 10,242 were individuals who had not passed their 15th year. Violent deaths next occupied the author's attention; by which causes, 768 persons are reported to have lost their lives in London; thus making one case in every 30 of the whole mortality. Of these 768 specified violent deaths, 208 were produced by fractures and contusions, 155 were drowned, and 89 died from burns and scalds, besides other casualties not necessary to particularise. After discussing, at some length, the mortality met with in prisons, lunatic asylums, lying-in hospitals, workhouses, and other eleemosynary institutions, Dr. Webster passed under review the large proportion of deaths recently met with in the eleven general hospitals of London, containing 3,223 beds, in which 1,051 deaths were reported to have occurred during the six months embraced in his report; thus giving one death in every 21·75 of the total mortality, or one to nearly three beds in all these eleven charities, during the past six months; the highest ratio being met with in the smallest institutions, except at the Free Hospital. Some very curious and important deductions were drawn from the data collected by Dr. Webster and read to the society, of which it is impossible now to give any abstract sufficient to enable readers to comprehend all the questions discussed; but, as the author's communication will no doubt be published *in extenso*, medical men will be able to investigate the whole subject of London hospitals, and the additional advantages they might confer upon the profession, as also on the public, were some of Dr. Webster's propositions adopted; especially in reference to periodical reports. The excess of births over deaths was afterwards noticed; it amounted to 13,532 individuals during the last six months. If to these be added the 10,128 constituting the excess of births over deaths in the two quarters immediately preceding, the total increase of the population by this source would be 23,660 during the past year; which furnishes one cause, amongst others, of the constantly increasing number of inhabitants throughout this now enormous metropolis. London, in the opinion of the author, is not *per se* insalubrious; but it is the manner of life followed by those who dwell in town, which so often proves inimical to the health of its inhabitants. The various questions bearing upon this important subject Dr. Webster discussed next, and also contrasted the rate of mortality met with in the British metropolis, as contradistinguished to that observed in other European capitals, all the facts stated proving the great superiority of the former as a salubrious place of residence; London being, in fact, more healthy than Paris, Berlin, Vienna, and even Rome, so famed as a refuge for, but often the grave of, invalids. Subsequently, the author proceeded to make a few observations on several circumstances, the judicious or improper application of which materially influences the health of individuals, and consequently of communities. These were—1. Food; 2. Clothing; 3. Habits or customs; and 4. Bodily exercise. After investigating some of the above topics, Dr. Webster animadverted strongly upon the system of tight-lacing in females, which fashion sanctions, although reason and experience condemn it, seeing it very often proves exceedingly inimical to health. Intemperance and tobacco smoking likewise received decided condemnation from the author; who further disapproved of the modern custom now rather prevalent, in the fashionable world especially, of frequently drinking tea on an empty stomach, and previous to meals. If often detrimental to nervous females, this habit is even more so to children and infants, as that beverage excites and renders irritable their physical constitution, by unduly developing their branular structure and its functions. Hence the author considers the vegetable in question should be put in the same category as opium, tobacco, ardent spirits, or even wine; and it ought never to be allowed to any young person, unless as a medicine. After some other remarks, Dr. Webster concluded his paper by alluding to the great benefits accruing to individuals from properly regulated bodily exercise, judiciously employed; he remarked, that the human frame may have both too little as well as too much exercise; on this subject, as in reference to dietary rules, the author strongly urged, that extremes should be always avoided; to these questions the well-known saying was most applicable, "*In medio tutissimus ibis.*" Dr. Webster concluded his communication by remarking, that, as the physical constitution of man often wastes from the want of sufficient muscular movement, so will the nervous organisation, on other occasions, become exhausted, or worn out, by excessive toil, as well as from too great mental excitement.

Dr. Webster was obliged to read his paper in abstract, owing to the greater part of the evening having been occupied in discussing some proposed alterations of the bye-laws.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 1st inst.:—

BEVAN, GEORGE PHILLIPS, Beaufort, Breconshire.
DAY, MARK ROWLAND, Oxford.
DICKENSON, JAMES EDWARD, Hart-street, Bloomsbury.
FLETCHER, ADAM, Bury, Lancashire.
LANG, JOHN FRANK ROSS, Newcastle-upon-Tyne.
LEWIS, ROGER, Narbeth, Pembrokeshire.
M'CARTHY, JAMES, Romford, Essex.
NICHOLSON, MARK EDWIN BULLIN, Cambridge.
ROBINSON, FRANCIS, Nova Scotia, North America.
SIDLEY, GEORGE HUGH, Royal Navy.
WRIGHT, HENRY GOODE, Hereford.

At the same meeting of the Court, Mr. James Smith Ayerst passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date April 12, 1847.

MILITARY APPOINTMENTS. — 93rd Foot: Acting Assistant-surgeon Alex Macrae, M.D., to be assistant-surgeon, vice Dempster, promoted on the Staff. Hospital Staff: Assistant-Surgeon James Carroll Dempster, M.D., from the 93rd Foot, to be Staff-surgeon of the second class, vice Burton deceased.

NAVAL APPOINTMENTS.—Assistant-Surgeon Ralph T. Tector (1850), to the Geyser steamer, for the Brazils. Surgeon John Moody (1838) to be Surgeon-Superintendent of the Blackfriars convict-ship.

OBITUARY.—On the 21st ult., at Rose Bank, Hanwell, Middlesex, Thomas Hume, M.D., Oxon, aged 81. Dr. Hume was

physician to His Grace the Duke of Wellington, when with the army in Portugal, and also physician for many years to his late Royal Highness the Duke of Cambridge. At St. Petersburgh, on the 9th October (old style), aged 55 years, Sir James Wylie, M.D., for many years physician to His Imperial Highness the Grand Duke Michael of Russia.

The Fellowship.—The examinations in classics, mathematics, and French, preparatory to the professional examination for the Fellowship of the Royal College of Surgeons, commenced on Wednesday last.

French Medical Congress.—The next medical congress will be holden at Paris, where preparations are already being made to render the assembly of savans worthy of the capital of France. The value of the new remedy against rabies—the *grains de cedron*, which are now in course of cultivation at the Garden of Plants—will form, it is said, one of the most interesting topics at the meeting.

Medicine in Spain.—Of 19,681 students admitted during the past year in the various universities and colleges of Spain, not more than 1646 were medical, 144 surgical, and 539 pharmaceutical.

Liverpool Chemists' Association.—We must correct an error in our number of the 16th October. Dr. Sheridan Muspratt's College of Chemistry has no connexion with the Liverpool Chemists' Association,—a Society founded chiefly for the practical study of *pharmaceutical chemistry*. It numbers 34 students, besides a numerous class of apprentices studying the Latin language. Its pharmaceutical meetings and courses of lectures, we are informed, are numerously attended.

Assistant Surgeon Kennedy, 64th Foot, now in India, has been dismissed the service by sentence of a court-martial, because he considered it beneath him to attend the wives and children of the soldiers of the regiment. He did not rightly appreciate the god-like nature of his profession.

An Inquest has been lately held at Shipston-on-Stour, on the body of Mr. Smiles, a resident surgeon of that town, who had destroyed himself. Aberration of mind for several months past was proved, and the jury returned a verdict of temporary insanity.

The Authorities in Bristol have determined to oppose the introduction of the Public Health Act. They consider that its operation elsewhere has been unsatisfactory, and that it has entailed great vexation, contention, endless expense, and litigation.

Several young Arabs and Egyptians are about to proceed to Paris from Egypt, to pursue medical studies.

The medical faculty in the University of Glasgow opened on the 5th inst.

A Quack's Mode of Advertising.—Placarding the walls with quack advertisements being against the law, some new plan must be adopted to make known to the gulls the arrival of the *charlatan*. Accordingly, soon after his arrival in Paris some years since, the dead-walls were covered with posters announcing in large letters, "One Thousand Francs Reward. M. Lagogney St. Joseph, physician-oculist, founder of the Medical Congress at Paris, &c., &c., has lost a snuff-box of exquisite workmanship, a token of gratitude from the Chevalier de Vieillard, lieut.-col. ex-marechal des-logis of the gardes du corps of Louis XVI., aged 85, on whom he operated for cataract at Mortagne. M. Lagoguey St. Joseph values the restoration of this snuff-box the more highly, because it was manufactured by his patient five years after the operation. Whoever finds the box is requested to bring it to the Hotel ——, —— street, where the physician will remain to the end of the month, and will pay the promised reward at any time between twelve and two." Of course no box was lost, but the object was to announce his arrival, and the hour when he would see patients, while the large amount of the reward offered (40*l.*) was intended to make known the extent of his wealth, and consequently his success in practice. To use an expressive, although an inelegant word, it was not a bad *dodge!*

A paragraph in a French Medical Journal, published soon after the National Association was established in London, is rather satirical upon the English profession. It says that "everywhere in the three kingdoms there is nothing but clamour and disputes; the physicians complain of the apothecaries, because they gain too much money; the apothecaries complain of the druggists, who are anxious to gain as much as the others; the quacks complain of the persecution (?) to which they are subjected; but the patients do not complain at all. This last-mentioned fact is," it says, "full of meaning."

Dissections in the East.—From the last Annual Report of the Medical College of Bengal, we learn that the number of bodies taken for dissection and operation to that valuable institution, amounted to 565. Of this large number, however, 254 were of no use, in consequence of rapid putrefaction, but those actually dissected amounted to the large number of 220, and 91 were used for operations, making a total of 311 bodies used for anatomical instruction in *one session*.

Compound Carbonized Animal Manure.—This manure is one of the most recent of the numerous compositions that have been offered to the public. It is said to contain "not merely one or two, but all the elements that constitute the food of plants," and is declared to be both cheaper and better than most of the other compounds that have been employed for increasing the fertility of the soil, and bringing vegetation to maturity. Four hundred weight of this compound is equal in fertilising power to fifteen loads of stable-dung, and the relative cost per acre is as 1*l.* 12s. in the case of the former, to 3*l.* 15s. in the case of the latter. It has been employed experimentally in the growth of nearly all the varieties of farm produce, and, as it is stated, with the greatest success.

METEOROLOGY OF THE WEEK.

Day.	Barometer.	Thermometer. Dry.	Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					A.M.	P.M.			
Sunday	29·680	40·2	38·3	— 3·0	S.W.	S.W.	Miles. 145	0·00	Nothing was shown at any examination.
Monday	29·215	43·6	41·7	— 1·8	S.W.	Calm. & N.	80	0·01	Nothing was shown throughout the day.
Tuesday.....	29·432	40·1	34·3	— 6·1	N. & N.W.	N.W.	110	0·00	Positive, and tension moderate, at 9h. p.m.
Wednesday.	29·563	43·1	40·8	— 3·5	S.W.	S.W. & W.	150	0·00	Nothing was shown throughout the day.
Thursday ...	29·775	47·6	43·9	+ 0·9	W.	S.W.	120	0·00	Positive, and tension moderate, at 3h. p.m.
Friday	29 852	53·5	50·9	+ 6·9	S.W.	W.S.W.	200	0·00	Nothing was shown throughout the day.
Saturday ...	29·859	56·0	51·8	+ 9·8	S.W.	S.W.	170	0·00	Nothing was shown throughout the day.
Means ...	29·625	46·3	43·1	+ 0·5	S.W.		SUM 975	SUM 0·01	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

HEALTH OF LONDON DURING THE WEEK.

The return for the week ending last Saturday exhibits a considerable increase on the mortality of previous weeks. In the first three returns of October, the deaths registered were successively 839, 860, and 845; in the last week they rose to 945. In the ten corresponding weeks of 1840-9, they fluctuated between 813 and 1115, and were on the average 959. But this average, if allowance be made for supposed increase of population, becomes 1046; on which the present return shows a decrease of 101. The increase of fever has been already remarked, and the observation is still borne out by the number of fatal cases under this head—the deaths from fever, which in the two previous bills were 54 and 49, rose last week to 65. Scarlatina also appears to make some progress; it was fatal in 41 cases, and seems to prevail in some parts of Walworth and Camberwell. Last week small-pox carried off 7 children and 2 adults; measles 21 children, hooping-cough 20, and croup 8.

Erysipelas numbers 7 fatal cases; and of 10 women who died after child-bearing, 7 sunk under puerperal fever. The further decline of diarrhœa and dysentery is shown by the deaths from these complaints in the last three weeks, in which the numbers have been successively 37, 30, and 22, which last is about the average of ten corresponding weeks. Last week 3 deaths from cholera were returned, but none of the cases had assumed the malignant form of the disease. Diseases of the respiratory organs discover a small increase of mortality, a fact which may be viewed in connexion with a fall of the weekly mean temperature from about 50° in the earlier part of October to 42° towards the end of the month. The increase is observed in pneumonia (or inflammation of the lungs) amongst children, and also in bronchitis amongst aged people.

It appears, from the Return for the eastern sub-district of Greenwich, that 9 old pensioners died in the Royal Hospital, between the 24th and 29th of October, and that their ages, the lowest of which was 61 years, and the greatest 90, averaged rather more that 74 years; 71 deaths were registered during the week in metropolitan workhouses, and 83 in hospitals and other public asylums.

MORTALITY TABLE.

Deaths in the week ending Saturday, Nov. 2, 1850.

(Metropolis.)

Causes of Death.	Nov. 2. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	444	306	194	945	9593
Specified Causes	440	304	194	939	9520
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	140	56	16	212	2250
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	7	16	18	41	486
Tubercular Diseases	54	91	13	158	1701
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	53	38	25	116	1094
Diseases of the Heart and Blood-vessels	6	30	15	51	303
Diseases of the Lungs, and of the other Organs of Respiration	76	19	43	138	1486
Diseases of the Stomach, Liver, and other Organs of Digestion	25	19	5	49	560
Diseases of the Kidneys, &c.	...	4	4	8	86
Childbirth, Diseases of the Uterus, &c.	...	4	2	6	142
Rheumatism, Diseases of the Bones, Joints, &c.	...	5	2	7	71
Diseases of the Skin, Cellular Tissue, &c.	2	1	...	3	12
Malformations	1	...	...	1	20
Premature Birth and Debility	29	1	...	30	217
Atrophy	31	...	4	35	166
Age	...	...	41	41	556
Sudden	4	3	3	10	127
Violence, Privation, Cold, and Intemperance	12	17	3	33	243
Causes not Specified	4	2	...	6	73

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	Nov. 2, 1850.	Sum of Ten Weeks.
London...	1948369	945	9593
West	301189	110	1353
North	376568	181	1686
Central...	374199	174	1874
East	393067	213	2045
South	503346	267	2635

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	17	Heart	41	Phthisis.....	112
Bronchitis	59	Hooping-cough ...	20	Pneumonia	61
Cholera	3	Hydrocephalus ...	22	Scarlatina	41
Childbirth	3	Influenza	2	Small-pox	9
Convulsions	38	Liver	12	Stomach	2
Diarrhœa	19	Lungs.....	12	Teething	15
Dropsy	11	Measles	21	Typhus	65
Erysipelas	7	Paralysis	20	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	770	464	306
Females	749	481	268
Total.....	1519	945	574

TO CORRESPONDENTS.

[To the Editor of the Medical Times.]

Sir,—Can you inform me how long a ring pessary may be allowed to remain in the vagina with impunity, and how often it is advisable to remove one.

Yours truly,

A Constant Reader.

It is somewhat difficult to determine the precise time which a pessary might "be allowed to remain in the vagina with impunity." We have known one instance in which a pessary was introduced and never removed. The patient lived for fourteen years afterwards, and suffered no inconvenience. There can be no doubt, however, that it is "advisable" for them to be occasionally removed and well washed prior to their re-introduction. For some years we have discontinued the use of pessaries altogether, greatly preferring the support afforded by a well-constructed abdominal bandage. In our practice formerly the pessary was removed once a month, or oftener if irritation was set up.

[To the Editor of the Medical Times.]

Sir,—Having recently taken a partner, I am somewhat at a loss to know how to proceed relative to introducing him to my brother practitioners in the town. Is it in strict accordance with professional etiquette for me to introduce my partner to them, or should they first call upon him, as the new comer, as is usually the mode of proceeding in general society. Your advice upon the above point will much oblige, Sir, yours truly,

Etiquette.

In reply we say, "stand not upon the order of your going; but go at once,"—otherwise our correspondent may lose the "*substance*" for the "*shadow*."

We have received another very long letter from Mr. Wilson about Homœopathy, and some irrelevant matters. We most sincerely wish Mr. Wilson would treat us as he does his patients—with homœopathic doses.

A Subscriber.—We have seen Dieffenbach operate for club-foot at two weeks old.

[To the Editor of the Medical Times.]

Sir.—May I take the liberty of submitting the following case of a medical student, of four years' standing, for your opinion?—

"I was called, together with a licentiate of the Royal College of Surgeons of London, to attend a boy who received a simple fracture of the femur, and continued in attendance, by request of the boy's father, during a period of six weeks; during the first fortnight I was in almost daily attendance, and for the remainder of the time I attended at least twice or thrice a-week. The father of the boy is now endeavouring to evade paying me, on the ground that I am not a licentiate. Would you kindly say, in your 'Answers to Correspondents,' whether I can recover remuneration, and how?"

"Burl," Student,

*** Whatever honour and good feeling may demand, we fear our correspondent has no legal claim on the shabby fellow who employed him.

A Lover of Fair Play and no Favour.—To our correspondent's first query we answer, Yes. In reply to his second query, we should say, that the Act of Parliament in question would not entitle the son of a military or naval officer to exercise the trade or calling of an apothecary or physician within the limits of the jurisdiction of the institutions to which these classes of practitioners respectively belong. If our correspondent's right to practise were contested in a court of law, we apprehend that he would be required to show proof, not only that he was professionally *apt*, but also legally *able* to do so; and this investigation would involve a reference to other Acts of Parliament, and to the decisions of former judges. It would not be an easy matter, without such reference, to decide what really is the trade or calling of an apothecary, a surgeon, or a physician. Medical law is almost wholly judge-made law. The appointment to a Union, being for a special service, provided for by special Act of Parliament, it would not come within the provision of 56 Geo. III.

[To the Editor of the Medical Times.]

Sir,—I shall esteem it a favour if you will inform me if the "Institute advertised in the "Medical Times" is to be published by a body of share holders, and what are the shares? if there are any for disposal, and what wil be paid for essays and cases to writers who may contribute their labour to the journal.—I remain, Sir, your obedient servant,

November 2, 1850. John Wyer.

*** We refer our correspondent to the Council of the National Institute, who are the best judges of the probable value of the shares of any journal pledged to the advocacy of their views. As regards the price of the shares we agree with Hudibras, that

"the worth of anything
Is just as much as it will bring."

We do not know whether essays and cases will be paid for, but we suspect that the proprietary have already discovered that they have paid too dear for their whistle. It is highly probable that contributors will be paid out of the profits.

Many other correspondents must this week allow us merely to acknowledge with thanks their numerous communications.

The Portraits of Professor Paget, Mr. J. R. Martin, and Mr. Coulson, have been lately added to the series which are being published under the superintendence of Mr. Stone. The artist, Mr. Macguire, has been most happy in his efforts to produce striking likenesses; they are admirable portraits, and do him great credit. Mr. Stone is also entitled to much praise. He enables friends and former pupils to look upon the features of men they love, and to whose teaching they may have been indebted.

ORIGINAL LECTURES.

CLINICAL LECTURES ON SURGERY,

AT

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.,

Senior Surgeon to, and Lecturer on, Surgery at Guy's Hospital.

LECTURE I.

Gentlemen,—My object in meeting you here, is to deliver to you a series of clinical lectures upon the cases of patients received into the wards of this hospital. In these lectures, I shall neither seek to be diffuse nor eloquent; but to impart to you, to the best of my ability, such practical information as may serve you as stock in trade, if I may use the expression,—that is, such information as you may with confidence carry with you from the hospital into private practice, to the bed-side of your patient for his benefit and your own success. Clinical or bed-side instruction, I hold to be highly advantageous to the student, and the best possible way of giving him a thorough and available knowledge of his profession; and I think that before long it is possible we may see the ordinary course of surgical lectures done away with and entirely replaced by clinical lectures. In clinical lectures the student has the opportunity of attending at the bed-side of the patient, and seeing *in oculis veris*, and judging for himself of the truth of the doctrines which are being taught him by his professor.

The first subject that I shall bring before your attention this morning, gentlemen, is a case of

TRAUMATIC TETANUS

This has occurred in a young woman, whose symptoms during the past week you have had an opportunity of watching. I will first read to you her report, and then make my remarks on the case and disease.

Mary Ann Brooks, aged 23, a married woman of a sanguineous temperament, excitable and hasty disposition, and great nervous susceptibility, was admitted into Guy's Hospital, Sept. 25th, 1850, under Mr. Hilton, with an inflamed swelling over the anterior surface of the patella, attended with considerable febrile disturbance.

Oct. 3rd.—There being an indication of fluid in the bursal swelling over the patella, Mr. Hilton laid it open by a longitudinal incision, when a small quantity of pus escaped. Poultices were applied night and morning, but the wound did not put on a healthy action, and the incision was extended in order to facilitate the removal of some sloughing inorganised matter that protruded through it. After this she went on pretty well, with little or no pain in the knee, till the morning of October 19, when it had lost all appearance of inflammation; the wound was however swollen, and pus—which was somewhat sanious and unhealthy—continued to be secreted. At five p.m. (Oct. 19th) she complained of stiffness of the jaw, and pain and stiffness of the back of the neck, saying that she thought she had taken cold, from the window behind her having been open during the day; her skin was cold and moist, and her pulse 100.

Oct. 20th.—Stiffness in the neck has increased, and is extending down the back; skin moist, but warmer; pulse 110. Ordered to take hydrarg. chlor. gr. ij.; pulv. opii, gr. j., secundâ quâque horâ; and to have about ʒss. of an ointment, consisting of gr. j. of aconitina, and ʒiij. of cerat. cetac. rubbed into the neck and down the spine every two hours.

Oct. 21st.—Pulse at 1 p.m. 120; 5 p.m. 124; 9 p.m. 120; pain and stiffness greater; spirits extremely depressed and desponding. At 6 p.m. a little extract of belladonna was applied over the sphincter ani, in order to produce its relaxation, and at half-past seven she had a copious motion, and soon afterwards another, both of which were of a costive nature, her bowels not having been previously relieved since the 17th.

Oct. 22nd., 2 a.m.—Has had two more motions, which are now of a relaxed character, and very offensive. To continue the pills every two hours, but with gr. j., instead of gr. ij. of hydrarg. chlor. Complains of great desire, but inability to micturate, with tenderness on pressure over the pubic region; a catheter being introduced, about half a pint of urine was drawn off, which was rather high coloured, strongly acid, and at first clear, but soon depositing a very large quantity of a whitish sediment, which, on examination, proved to consist of lithates with a little mucus; the amount of phosphates was not greater than in healthy urine. 3 a.m., pulse 108. Sleeps pretty well and soundly, during the intervals of remission of the paroxysms; which intervals sometimes last five, ten, or fifteen minutes; during sleep there is perfect composure, and a relaxation of the previously spasmodic muscles, giving the face its natural aspect, and the countenance an expression of tranquillity. The first indication of an approaching paroxysm is marked by a twitching of the muscles of the face, attended with a slight interruption to the previously regular breathing, as in uneasy sleep; this is followed sometimes by a relapse into her former state of repose, but more frequently by a sudden and forcible contraction of the masticatory muscles, closing the teeth and biting the tongue, if it happened to be protruded; then by a distortion of the face, from the spasmodic action of its muscles, the angles of the mouth being drawn backwards and upwards, and the lips apart, showing the closed teeth, and giving to the expression a forced or painful smile, or rather grin—constituting the risus sardonicus; the nostrils depressed; the eyelids nearly closed, producing an appearance as though she were attempting to open the eyes under the influence of a strong light; the eyebrows corrugated and drawn down, and the forehead wrinkled; next, by a little confusion of the respiratory process, attended with a convulsive sighing; and, lastly, by a contraction of the muscles of the back, throwing the chest and abdomen forwards, and the head back, so as to produce opisthotonos. Such were the symptoms as they then occurred, and, having lasted a few seconds, the paroxysm was over, and she was very soon in a profound sleep again. The pulse during the paroxysms was a little accelerated. Can swallow fluids very well, taking a small quantity at a time, and completing each act of deglutition thoroughly before the next is commenced, she continues to take plenty of nourishment in the shape of beef-tea, wine, &c., saying that she cannot swallow anything solid.

1 p.m.—Pulse 124; opisthotonos more decided; the paroxysms occur oftener and are of longer duration than during the night; and during the intervals or remissions, when awake, the face has a continuous distorted aspect. Intellect quite clear, as it has been during the whole time. To omit the hydrarg. chlor., but to continue the gr. j. opium pills every two hours as before, and to take an astringent mixture to check the very relaxed condition of the bowels, which might otherwise prove a source of irritation and excitement to the disease.

9 p.m.—Pulse 118; has numbness and a tingling sensation of the right hand and fingers, and of the right leg, from the influence of the aconitina—which is still applied every two hours—on the nerves of common sensation.

Oct. 23, 2 a.m.—Has more difficulty in swallowing, and complains much of thirst.

7 a.m.—Pulse 120; micturates freely, bowels comfortable. Complains now, as her chief source of distress, of an agonizing pain running through from the scrobiculus cordis to the spine, evidently showing the implication of the diaphragm; a little of the aconitina ointment was applied over the region of this muscle, as well as to the spine, and in a short time she became comparatively free from pain there, and remained so afterwards.

9 a.m.—Pulse 118; takes plenty of nourishment and swallows better than she did.

Oct. 24, three a.m.—Is much worse; the paroxysms remaining longer, and recurring oftener, causing her to shriek out and to upbraid those present for not killing her. Having complained of severe pain in the region of the hip of the left side, a little of the unguentum aconitinæ was applied twice in the course of half an hour over the hip, and, in a very short time, the pain was entirely alleviated there; this looks something more like a *propter hoc* than a mere *post hoc;* and it would appear that the aconitina, if it do nothing more, certainly has the effect of diminishing pain and suffering.

About 5 a.m.—As she was in the act of swallowing, she became suddenly and most violently convulsed, her respiration ceased, her face turned black, her eyes were glaring, and her wrist pulseless; for a short time she was apparently dead, she soon, however, rallied again, and in half an hour was as well as she had been previously. During the day her pulse became more feeble, the muscular rigidity increased, and extended from the trunk to the lower extremities, so that it was with great difficulty that she could be

raised in bed; and the spasms in the back she described now as catching her breath and almost taking it away.

Oct. 25.—The difficulty in swallowing has increased, every act of deglutition exciting opisthotonos, which jerks her up in bed. Trismus is also more complete, for she cannot open her teeth wider than just sufficient to admit the tip of the little finger. Urine still loaded with lithates. Poultices have been constantly applied to the knee, which continues to discharge a whitish pus. Pulse 120.

Quarter to 5 p.m. — Whilst in the act of swallowing some coffee, her muscles of deglutition being unprepared, a revulsive action was set up, which occasioned so much excitement and irritation, as to throw the whole system into violent tetanic convulsions; she rallied however, for a short time, but became again convulsed, gasping for breath: her heart made a few fluttering efforts, the pulse was no longer to be felt at the wrist, the heart ceased to beat, and life became extinct.

Tetanus, gentlemen, may be either acute or chronic; the former runs its course quickly and is attended with great severity of symptoms; the latter is less rapid in its progress, and happily more amenable to treatment. It is again divided into traumatic and idiopathic. Traumatic tetanus is that variety which depends on, or is excited by, some external injury, such as a punctured or lacerated wound, or a compound or other fracture. If I were asked to describe the kind of wound most likely to produce this disease, I should say that the punctured wound was of all others the most likely. Idiopathic tetanus, contrary to the traumatic form, arises spontaneously in the system, without any external exciting cause. But, gentlemen, it appears to me doubtful, whether there be not, alike in both varieties, some idiosyncrasy or diathesis, some previous tendency in the individual to the production of this awful disease. If we take into consideration the enormous amount of external injuries of every kind and description, daily occurring, and the comparative rarity of tetanus, it certainly must seem to depend, not so much on the external cause, as on some pre-existing disposition, some natural tendency, *sui generis*, to the disease. In the present instance we see the disease set up in consequence of an incised wound, in a subject who has always been hasty and excitable and of great nervous susceptibility.

Tetanus is a disease which in its effects simulates cramp and produces a spasmodic contraction of the muscles, more frequently of the extensors than of the flexors. It may, in another view, be compared to irritative fever, with this difference, that tetanus results from an irritation of the nervous system, while irritative fever arises from some excitement acting on the heart and arteries. When it affects the muscles of the lower jaw, causing the closure of the teeth, it is called trismus, which, however, is only a variety of, and included under the general term, *tetanus;* when the extensor muscles of the back become influenced, so as to draw the head and neck backwards, and cast the body forwards, it is designated opisthotonos, and this is sometimes produced to such an extent as to throw the whole body into a complete arch, resting only on the head and heels. Emprosthotonos is just the opposite condition to opisthotonos, and is said to occur when the body is bent forwards, the head being drawn down towards the knees; it is, however, very rarely indeed seen.

To detail to you the symptoms of tetanus would be to recapitulate what has been already stated in the report which I have read. Suffice it then to say, that the first symptom which announces the approach of this disease, is pain and stiffness in the back of the neck, and an uneasy feeling about the lower jaw. These symptoms should at once arrest the attention of the surgeon; but do not, gentlemen, as soon as you suspect the presence of this fearful complaint, run to your patient and ask him if he have any pain in his jaws, or can open his mouth, or you may at once excite his suspicions of what you think is the matter with him, and this may produce such nervous excitement and irritation, as to hasten the progress of the disease, when it is in its most curable and tractable form. Go quietly to him, and ask him to show you his tongue, and you will be able to gain the information you require, without letting your patient have the least imagination of what you anticipate and dread. If the disease advances, the next symptom usually observed is pain in the scrobiculus cordis, as if the waist were tightly constricted; this is followed by difficulty in swallowing, increased trismus, opisthotonos, and death. The bowels are usually constipated, and the urine retained from the spasmodic contraction of the muscles of the perinæum; and the abdominal parietes are generally tense, and as hard and flat as a board. Death may occur in two ways; the patient may sink, exhausted by nervous irritation, or he may die suffocated by a spasmodic closure of the glottis. The spirits are commonly extremely depressed during the first stage of the disease, but the intellect remains clear throughout; this is a symptom which infallibly distinguishes tetanus from hydrophobia.

With respect to the treatment, gentlemen, little, I regret, can be said, in the present unsatisfactory state of the pathology of the disease. There are few active remedies in the Pharmacopœia, and out of the Pharmacopœia, that have not been tried, but all unsuccessfully. The prevailing opinion now is, that it is an atonic disease, and that the best plan of treatment is to give quinine, and support the vital powers with wine and nourishment; this certainly accords most with my own feelings and experience on the subject. The Woorara poison has been proposed and recommended, in consequence of the results of an experiment of Professor Sewell on an ass. This gentleman produced symptoms resembling tetanus by the administration of strychnia to an ass, and then gave it the Woorara poison. The animal appeared dead for some time, but, by keeping up artificial respiration, animation was restored, and it ultimately entirely recovered. In the case before us, the aconitina was tried, and tried assiduously, but only with the effect of diminishing pain. This alkaloid, as you all know, is extracted from the aconitum napellus, and is the most powerful drug of the Pharmacopœia, prussic acid not excepted. It has a direct paralysing influence over the nerves of common sensation, lowers the pulse, and diminishes common sensibility to external impressions.

It has been stated, that tetanus is never produced by a wound that is suppurating; but this is altogether incorrect and untrue, for I have known several cases in which the symptoms have come on during suppuration; and in the report that I have just read to you, you will observe that the wound was suppurating before, and after the disease became established.

According to the views of Dr. Marshal Hall, tetanus is essentially a disease of the spinal marrow, and may be either eccentric, produced by some irritation to the excito-motory system; or centric when arising spontaneously in the system. But, gentlemen, whether we look to the cause, the symptoms, the treatment, or the morbid appearances after death resulting from this awful disease, as a means of throwing light upon its pathology, we are alike unsuccessful; for, as yet, tetanus remains involved in the same obscurity that has enveloped it from the first moment that it became enrolled in the category of disease; and it therefore affords one of the best subjects in surgery for deep scientific investigations.

The next case that I shall bring before you is that of Caroline Stedman, aged 20, admitted into Guy's Hospital, October 15, 1850, in the clinical wards, with a

TUMOUR ON THE THIGH.

Her history, which I will read, is as follows:—

A dark-haired, sharp-featured, and somewhat hysterical young woman, with an excitable disposition, and an appearance older than her age would warrant, states that seven years ago, her attention was attracted to her right thigh from pain, as though she had caught a cold in it; and, on examination, she discovered a small swelling, about the size of a filbert, on the anterior aspect of the superior third of the limb; this gradually but progressively increased in size for three years, when it had attained the same dimensions that it presented on her admission—so that it has not grown at all during the last four years. Five weeks since, she undertook a walk of thirty-five miles in one day; and in a short time the tumour in her leg, from which she had previously derived but little inconvenience, became so painful that she was obliged to give up her avocations as a general servant. On the anterior and inner aspect of the superior and middle third of the right thigh is an enormous swelling, firm, and but little painful to the touch, rather softer in the centre than elsewhere, circumscribed, and freely moveable on the subjacent structures. No pulsation can be felt, but a distinct bruit may be heard, with the stethoscope placed on the anterior and inner, but not on the outer, aspect of the tumour; this

would rather indicate pressure on, but not implication of, the femoral artery, diminishing its calibre, and offering an obstruction to the free transit of the blood. Has never experienced much pain in the tumour, but, when growing, had frequent cramps in the right leg, and shooting and burning pains about the knee. The pulsations of the posterior tibial artery can be felt, but the right foot is always colder than the other. Her general health is good; there is no evidence of any functional disturbance, and no enlargement of the glands of the groin. A few days after her admission, an exploration into the tumour was made by Mr. Cooper, who punctured it with a lancet, when a purely sanious discharge issued. A small portion of the tumour being procured, was examined microscopically; but its appearance was such as to leave considerable doubt and difference of opinion as to its true nature—there being blood globules, nucleated cells, and a tissue having a disposition to a linear arrangement.

There is, gentlemen, as has been stated in the report, considerable doubt as to the nature of this tumour—whether it be carcinoma medullare, or whether it be an innocent non-malignant growth; it certainly has not the history and soft consistence of the former, neither do its characters entirely correspond with the latter; but, I must say, the impression its microscopic appearance gave me was, that it was not malignant. Under these circumstances, there is one of three things to be done: to leave it alone, to remove the tumour, or to amputate at the hip-joint; and, having given due consideration to the subject, I have come to the conclusion, that it will be best to remove the tumour, as it is, from its great size and weight, a source of annoyance and irritation to the patient. Accordingly, it is my present intention to meet you in the operating theatre to-morrow for this purpose; but, should I find, during the operation, that the tumour be of the malignant kind, and connected with the femur, or that it implicates so much of the soft parts, that to remove it would occasion a wound which nature would be unable to repair, I shall immediately recommend the patient to have amputation at the hip-joint performed, and, consequently, shall not be unprepared with my amputating instruments at hand.

Having, then, determined on operating, I shall occupy the ten minutes I have by making a few remarks on surgical operations in general, but more especially in reference to the one in question. There are some operations—as tying an artery in hæmorrhage, or operating for hernia—which require to be performed immediately, and admit of no delay; there are others, however, which you may postpone advisedly, and it may even be proper to do so,—for instance, cataract, the operation for which is usually performed during the summer. In the case before us it is not advisable or proper to delay, for the tumour is becoming painful and troublesome, and a slight inflammatory action has set up round the punctured wound that was made the other day in exploring it, which, if it be malignant, might arouse and rapidly hasten the progress of the disease.

The next consideration is the method of performing an operation: in cutting for stone, for example, there are various methods and processes by which you may perform the operation; thus, you may cut through the perinæum, you may operate above the pubes, or per rectum; but in the case before us, on the contrary, there is no choice, there being only one method of accomplishing the object in view, namely, to cut down on and remove the tumour.

The conduct of the surgeon should always be a matter of consideration and reflection, before, during, and after an operation, and I shall throw out a few observations on each of these periods. Before the operation: the moral condition of your patient must be attended to; he must be told of the necessity for the operation, making the best representation of it you can to him; for example, if you are going to operate for hernia, you would not say to him, "My good fellow, a piece of your gut has come down, and I must cut into your belly and return it;" or you would surely make a coward of the bravest man, and perhaps lead him to object to the performance of the operation; but you would tell him quietly and mildly that a small piece of his intestine has come down, that the opening through which it came is too small for its return, and that it is necessary just to make a slight incision down, and enlarge this opening, to release the constricted intestine, and return it to its natural place. If put in some such way as this, you say no more nor less than the truth, but you soften the character of the communication, and inspire confidence and courage in your patient.

The place of the operation should be attended to; see that you have plenty of room, and plenty of light, and that you do not place the patient so that you will be in your own light during the operation. See that your apparatus and instruments are all at hand and ready, and that you have proper assistants to help you; when I say proper assistants, I mean such that you can place confidence in, and that will not turn away when the operation has commenced, and their services are most required. All these are matters of consideration that should be thought of and attended to before the patient is brought to the scene of action, that he may not be kept in a state of suspense and anxiety. These remarks, gentlemen, may to you seem trivial and of little importance, for in this hospital we have everything prepared and ready for us, and nothing to think of save the operation itself; but the student must not be deceived, he will find it very different when he gets into private practice. He may be called ten miles away from home to a little cottage, in which he can scarcely find a place suitable for an operation, with small windows that admit but little light, and no assistant at hand that he can confide in. If he have commenced his operation, and have not thought of or attended to these points, he will find, when too late, that they were not of so little importance as at first sight, he was disposed to consider them. During the operation, coolness and precision are absolutely necessary under any state of things. Do not attach too much importance to your anatomical knowledge; it is undoubtedly the groundwork of surgery, and your land-mark in difficulty; but, if you trust to it as your only guide, you may be misled, when there is a change of position of parts, or any abnormal distribution or arrangement. There is always a dread, a natural dread of loss of blood,—it is the life of the flesh, and its loss should always be prevented as much as possible by the surgeon. After the operation, see that your patient is placed comfortably in bed; give him consolatory words, and try and dispose him to repose. Of the necessity of seeing him again soon, and of being on the alert for secondary hæmorrhage, more especially after the use of chloroform, I need scarcely speak. In fact, the conduct of a surgeon before an operation, during the period of its performance, and after its completion, is a subject well worthy your deep consideration; it is of as much importance to the well doing of the patient as the most skilful manipulation. Indeed, I believe that, as a general principle, as much or more depends upon the judgment in the proper preparation before, and management and disposal of your patient during and after the operation, as upon the skill of hand required in the successful performance of the operation itself.

LECTURES
ON
BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE IX.

Remarks on the Chemistry of Tubercle.—The Special Pathological Anatomy of Tuberculosis continued.—Pathological Anatomy of the Skin and of the Subdermoid Cellular and Adipose Tissues.—Pathological Anatomy of the Mucous Membranes and of the Subjacent Tissues; of the Pituitary Membrane; of the Mucous Membrane of the Epiglottis, Larynx, and Trachea; of the Bronchi; of the Mouth and Fauces; of the Tongue, the Pharynx and the Œsophagus.

The history of tubercle comprised in the two former lectures contains indubitable proof that this anatomical element of disease is a substance *sui generis*. Its physical, microscopical, and chemical characters show that it differs from every educt or product of nutrition or healthy secretion or excretion, and from all the educts or products, structural or amorphous, of ordinary inflammation. It differs from every other morbid product, non-malignant, malignant, or parasitical. It is essentially neither serum, pus, coagulable lymph, albumen, fibrine, nor any particular texture. At the

same time, it is manifestly derived from the blood in an unhealthy condition, and the characters of the product and those of the morbid blood have certain relations which indicate very satisfactorily that the one depends upon the other. The morbid liquor sanguinis, and the deficient and perhaps structurally defective red corpuscles of the blood, are the analogues of the amorphous stroma and defective cells of tubercle; the vitiated albuminous constituent of the plasma is probably the analogue of the caseous constituent of tubercle and even of tuberculous and scrofulous pus; the low vitality of the blood indicated in my diagram is the analogue of the comparatively inorganic quality of the tuberculous product and of the very low degree of organisation which it presents. Organic chemistry has taught us thus much; it remains for new researches to develope the essential character both of the morbid condition of the blood and of its product the liquor tuberculi; the discovery of the one will necessarily comprise that of the other. When treating of the general pathology or theory of the disease, the views which have been entertained of its nature will come under consideration. In the mean time, the analyses recorded in the last lecture suggest a few remarks, and the anatomico-pathological facts connected with the diseased state of the blood and the deposit of tubercle, require to be detailed, since no theory can prove satisfactory which is not consistent with these facts.

As respects the chemistry. In the first place, although variable, there is a much nearer approach to uniformity in the results than might have been expected. We have to bear in mind the very variable circumstances under which tubercle is deposited in the tissues, and collected by the chemist for examination. Its composition undoubtedly varies according to the length of time it has been deposited and the stage of its development. If we were to admit that it is a definite chemical compound, which is very probable, but by no means proved, and is perhaps incapable of proof or disproof, still this compound must be subject to changes and to admixture with numerous materials, as with those composing the tissues, which, by pressure and otherwise, become disintegrated and blended with the essential constituents of tubercle, or with the products of inflammation, as pus or lymph, from inflammation of the parenchymatous structure of an organ, or with mucus and pus from the mucous membranes, or with blood itself. It is always difficult, and frequently impossible, for the chemist to separate these different products, or to estimate their proportions. Tubercle must also, from the same causes, exhibit differences according to the nature of the tissue in which it is deposited.

Chemical analysis leaves no doubt that tubercle contains a protein compound as an essential constituent, which appears to bear a close analogy to, if it be not identically, casein. This fact is confirmatory, if not demonstrative, of the view taken throughout these lectures, that it is a secretion from the blood, for all the facts of science contradict the notion, that protein compounds are formed in any of the animal tissues, or are derived by those tissues from any other source than the blood. The caseous quality of tubercle and scrofulous pus indicates the presence of casein in the liquor tuberculi, showing that from the liquor sanguinis of tuberculous blood a caseous blastema is exuded, differing, as respects its caseous quality, from the ordinary healthy blastema. Its caseous quality renders it unfit to nourish the tissues, and gives it a tendency to solidification.

The existence of pyine, regarded as a tritoxide of protein, detected in particular specimens by various chemists, does not, in my mind, invalidate that of casein. It is manifestly by no means a constant constituent. The question will at once arise, whether a peculiar substance may not be the result of inflammatory action on tuberculous blood resulting in the superoxidation of the protein compounds. In this point of view, pyine would be regarded as an inflammatory product superadded to the essential constituent of tubercle; but the chemistry of the phases and complications of tuberculous development is at present so imperfect, that it is scarcely safe to venture even a conjecture upon such a point.

One of the most interesting facts in connexion with the chemistry of tubercle, is the existence of a large proportion of fatty matter. This is the result of a majority of the analyses, and Rokitanski, Gulliver, and Scherer affirm, that this constituent increases from the time that tubercle loses its transparency and as the softening process proceeds.

A most curious fact also was discovered by M. Guillot, which, if corroborated, might ultimately assist us in arriving at a knowledge of the essential nature of tuberculosis. M. Guillot has ascertained experimentally, that the dried parenchyma of those portions of the lung which in phthisis, as also in pneumonia, have become impermeable to the air, contains a very large proportion of fat. In phthisis as much as 40 and even 52 per cent. of fat is said to have been detected in the desiccated tissue of the diseased part of the lung. It further appears, that the proportion of fat in the dried parenchyma of the fœtal lung is diminished after respiration becomes established, from the proportion of ten or 18 per cent. to six per cent., and that in all diseases wherein a portion of lung loses its functional powers, an accumulation of fat takes place in that portion.

Two explanations have been suggested of this increase of fatty matter in tuberculous or non-respirable lung. It has been held, that the materials of respiration being to a certain extent converted into fatty matter in the blood, preparatory to eremacausis, and this eremacausis taking place in part during the passage of the blood through the lungs, that an accumulation of fat takes place in consequence of the lung having ceased to perform its function. It has on the other hand been held, that tuberculous matter is essentially composed of a large proportion of fat. According to the latter view, the nature of tuberculosis is diametrically opposite to that suggested by some authors, it is a fatty degeneration.(a) These facts have to be associated with the frequency of a fatty condition of the liver in tuberculosis, as observed by Louis and others, although other results were obtained by the experiments of Regnaud; and with the effects of cod-liver oil in the treatment of tuberculosis. The whole must be comprised in the consideration of the essential nature and theory of the disease. The excess of fatty matter in tubercle is taken by Dr. Madden to imply a retrograde morphology, and this accords with the views of Dr. Addison, to which I have already adverted.

Tubercle appears also to contain a great excess of extractives, and, as compared with other proteiniform products, an excess of water. These and its other qualities associate the tuberculous deposit with the vitiated state of the liquor sanguinis, which I formerly described as an essential character of tuberculous blood.

The analysis of cretaceous masses is one of the most interesting, not to say important, parts of the subject. The uniformity of the results, and the analogy to bone-earth and bone will strike every one. Moreover, it appears that after the process of softening, if the tendency of the constitutional and local affection is to quiescence and health, and even before softening, if that tendency exist, the aqueous parts of tubercle must be absorbed. Where this tendency to health and restoration occurs, the analyses also prove another most important fact; the crude tuberculous matter which, in its original state, is probably incapable of resorption, must undergo transformations by which it is rendered susceptible of that process. It is only necessary to consider the large proportion of earthy material which remains in cretaceous tubercles, if these cretaceous masses are justly regarded as the remains of tuberculization, in order to admit this. The quantity of earthy matter aggregated in these masses is a most significant fact. Crude tubercle contains but a very small proportion of earthy salts—say one per cent.—whereas these masses frequently contain ten, twenty, and thirty grains. The deposition and resorption of animal matter, leaving earthy particles behind, must have taken place to a very great extent, or for a very considerable period. It appears to me, that where the tendency to cretaceous aggregation has existed in the highest degree, the blood must have wholly or partially lost its tuberculous quality; and that, after having secreted intractable tubercle, owing to this favourable change it pours out a blastema, which, after depositing its earthy salts, is susceptible of resorption, and is actually absorbed, the earthy particles gradually accumulating in the tuberculous cavity. That some such process as this occurs follows from a consideration of the whole series of chemical facts.

The ultimate analyses and their reduction into formulary have been regarded by some rather as matter of amusement than of utility. I cannot adopt that view. Whatever the defects of organic chemistry at the present moment, I believe it is gradually elevating medicine into a demonstrative science; and I think it is incumbent on us to regard dis-

(a) Compt. Rendues, n.n. 12, 1847, Academy of Sciences.

covered facts in every point of view. Scherer finds, in one point of view, an excess of carbon and hydrogen in tubercle from the liver as compared with that from the lung; and he thinks this may arise from the deposit in the lung being more exposed to the air. Dr. Glover's analyses give to the protein compound of tubercle in general a smaller per centage of azote than those of Scherer.

When it is considered that the blood of probably one-third of the population of Europe is more or less affected with the tuberculous taint, and tuberculous subjects are exposed, equally with the robust and healthy, to the exciting causes of all those anatomical changes constituting the fatal diseases which cut short the life of man, it will be readily understood that the morbid anatomy of tuberculosis might be made to comprise the whole anatomical catalogue. Accurate observation would no doubt show, that all the pathological products of disease are more or less influenced by the tuberculous state of the blood. Without extending their researches thus far, morbid anatomists have ascertained, not only the fact of the deposition of tubercle in the organs and tissues as a peculiar morbid element in the tuberculous subject, but the occurrence of other pathological conditions; and the positive increased frequency of various anatomical changes in connexion with this disease of the blood, and of the particular forms and varieties which it presents. No part of scientific medicine perhaps does higher honour to the profession than the genius, and depth and accuracy of research and observation, displayed in the minute investigation of the characters and specialties of morbid structure in this disease, as shown in the works of Baillie, Laennec, Andral, Carswell, Louis, Hasse, Rokitanski, and other pathologists. It will be impossible, in these lectures, to give anything approaching to a complete account of these labours, nor will it be necessary to embrace the extreme minutiæ, but I shall describe succinctly the more important pathological appearances which have been described as occurring in the various stages and degrees of tuberculosis, so as to convey a tolerably accurate notion of the nature and extent of the deterioration and disorganisation of structure to which the subjects of this direful malady are more or less liable. Tuberculosis, as a disease of the blood, can only be thoroughly understood by giving attention to the ravages it commits in the solid structures, and the further investigation of the subject could not be profitably pursued without the principal anatomico-pathological facts being brought into view. In the description of the diseased changes I shall, for the most part, use the language of the original observers, as best calculated to convey an accurate notion of the appearances which they are intended to represent.

PATHOLOGICAL ANATOMY OF THE SKIN AND OF THE SUBDERMOID CELLULAR TISSUE IN TUBERCULOSIS.

As stated formerly, on several occasions, in the early stages and slighter degrees of a tuberculous state of the blood, particularly while the individual continues in comparative health, and the affection of the blood and tissues can be regarded only as a predisposition to disease, tuberculous individuals are extremely subject to cutaneous affections. These affections are usually designated as scrofulous, and occur most frequently in children, or at that period of life in which the blood is generally not matured for the deposit of tubercle, and at which the skin is most susceptible of diseased action. They consist of vesicular and pustular eruptions, and occasionally of papular and scaly diseases. They are produced by various exciting causes, and especially by the absorption of crudities from the alimentary canal. Similar diseases are produced from similar causes in healthy persons, but they run a different course. Scrofulous eruptions of the skin are essentially chronic and sub-inflammatory, and they have a suppurative and ulcerative tendency. They indicate a vitiated state of the dermoid blastema, corresponding with the low vitality of the blood and the defective cell-growth in the tuberculous predisposition, and they are cured by those remedies which are most efficacious in restoring the blood to its healthy standard. It is in this respect that they are scrofulous, and constitute a part of the special pathology of tuberculosis. The system is rarely affected secondarily by these eruptions, but they frequently occur simultaneously with other local affections to which the tuberculous habit is also liable,—as, for instance, with ophthalmia, abscesses, affections of the bones and joints, &c. They generally subside, particularly under judicious management; and there is reason to believe, that, with other external local manifestations of tuberculosis, they have a beneficial tendency, as respects the state of the blood, since it frequently happens in tuberculous families, that those children who pass through the external local affection escape the deposition of tubercle throughout life. Lupus appears to be a specific hypertrophy, with or without ulceration and suppuration, and in other instances the skin in tuberculosis has a tendency to become hypertrophied. The usual liability to slough exhibited in the latter stages of most chronic diseases, as might be predicated, is particularly marked in tuberculosis.

The subcutaneous cellular tissue and the deeper layers of the cutis are also especially liable, in a tuberculous state of the blood, to chronic inflammatory affections; hence the frequency of abscesses, ulcers, and fistulæ on the external surface. The tuberculous character of these affections is in general sufficiently well marked. In the formation of abscesses, the redness, tension, pain, swelling, and heat, are comparatively insignificant; there is expecially an absence of the phlegmonous hue; they are less circumscribed, and when a pyogenic membrane forms, the abscess fills with pus having the characters of tuberculous pus already described. Such abscesses degenerate into ulcers possessing peculiar characters which are highly significant of the qualities attributed to tuberculous blood, and of the defective cell growth in the tissues. Their margins are smooth, obtuse, and overlapping; of a remarkable characteristic purple colour, and rather hard and tumid; the surface of the sore is of a light red colour; the granulations are few, pale, tall, flabby, slightly vascular, of low organisation and little sensibility, and sometimes indistinct; the discharge is copious, thin, slightly ropy, with curdy flakes; the pain is inconsiderable; they frequently remain indolent for a length of time, neither increasing nor diminishing in size; they cicatrise with very great difficulty, the cicatrix being soft, blue, and easily destroyed by the slightest excitant, which will renew the ulceration. These affections frequently occur in several parts of the body simultaneously or successively, indicating a common origin from a morbid state of the blood. Their characters are essentially the same, whether the constitution of the individual is affected only to the extent of a predisposition to disease, or whether the blood is affected with tuberculosis as a disease, differing only in degree and in the extent to which the local affection is complicated with constitutional symptoms. They frequently alternate with other local tuberculous affections, which are generally described as "scrofulous." The characteristics of these affections constitute an important part of the special pathology of tuberculosis. Making allowance for the differences of structure and of the functions of different organs, tuberculous or scrofulous ulcers preserve a certain degree of uniformity, whether they occur internally or externally, or with or without the deposit of tubercle.

The pathology of the skin and subcutaneous tissues presents another important feature. It has been stated on former occasions, that in tuberculous subjects there are frequently a puffiness of the surface of the body and a spurious hypertrophy. This is sometimes remarkably the case in scrofulous children when in health, but when active tuberculosis sets in, and even where little more than a long-continued local external development of disease occurs, one of its most constant effects is the disappearance of the subcutaneous fat, and indeed of the fat from nearly every part of the body. The fat, or its elements, must be absorbed by the blood, and this craving of the blood for fat, in connexion with other facts relating to the fatty element of nutrition, which have already been stated, or will develope themselves as we proceed, is justly regarded as having some very important bearing upon the essential nature of the disease, and will come under consideration upon a future occasion.

Although tubercle is very seldom deposited in the skin or in the subcutaneous cellular tissue, these structures are not totally exempt. General tuberculosis has occasionally manifested itself locally in the first instance in the skin only. Dr. Crampton relates an interesting example of this fact.(a) Tubercles of a caseous character, imbedded in the subjacent cellular tissue penetrated the corion, some of them consisting of a tough, hard, fibro-cartilaginous substance without blood-vessels, had existed five years, when the patient became phthisical, and died in an extreme

(a) Transactions of the Irish Association. Vol. V.

state of emaciation, the liver, lungs, and spleen being throughout in a tuberculated state. Laennec also describes an interesting case, in some respects different, which occurred in his own person. When about 25 years of age, examining some vertebræ, he received a slight scratch of the finger with a saw; the scratch inflamed, and there gradually formed, almost without pain, a small roundish tumour, apparently confined to the skin, which at the end of eight days was of the size of a cherry-stone; the epidermis cracked, and showed the tumour within —yellowish, firm, and in every respect like a crude yellow tubercle; it was detached with caustic, which softened it, and made it like a soft friable tubercle, the walls of the cavity being of a pearl-grey colour, slightly semitransparent, and without any redness; after again cauterising the part soon healed.(a) Laennec died of tuberculosis pulmonalis twenty years afterwards.

I have myself witnessed the formation of two distinct tubercles in the back of an individual of 60 years of age, who exhibited marks of scrofula in youth, and several of whose children died of phthisis; the parts surrounding these tubercles were made to suppurate with hot applications, and the cheesy tuberculous matter was discharged, being followed by tuberculous suppuration, the parts ultimately healing. This individual died some years subsequently, after a paralytic seizure.

Although the scrofulous affections of the skin to which I have referred, and the deposit of tubercle in any tissue or organ, rarely occur together in the same individual, yet they do so occasionally. These cutaneous affections sometimes occur simultaneously with the actual deposit of tubercle in the external lymphatic glands. It is important also to remark, that the abscesses, ulcers, and fistulæ here referred to are identical in character with similar pathological conditions proceeding from tuberculous deposits, whether in the external or internal parts, which have softened and induced suppuration of the contiguous parts, and found their way towards the surface. These affections, also, when they prove fatal, do so by passing into some variety of internal or into general complicated tuberculosis, with the deposit of tubercle in the internal organs. These facts clearly indicate, that the affections in question constitute a part of the special pathology of tuberculosis as a disease of the blood; and there is no ground for the absolute distinction too frequently drawn between scrofula and tubercle. Scrofulous children have sometimes throughout life the most unblemished skins, and tuberculous subjects are frequently the victims of skin diseases.

PATHOLOGICAL ANATOMY OF THE MUCOUS MEMBRANES AND THE SUBJACENT TISSUES IN TUBERCULOSIS.

I have already described the tendency of the mucous membranes to functional derangement in every variety and degree of tuberculosis, and the liability of these membranes to irritation, morbid secretion, and inflammation. In the immature stages of the disease of the blood in which external affections occur, classed together as "scrofula," these slighter affections are so common, that a defect in the digestive organs has frequently been set down as the proximate cause. Writers on scrofula, however, treating it as an external affection, do not mention the pathological appearances which I am about to describe. Nevertheless, regarding the disease of the blood as the parent both of external and internal tubercular affections, we must associate the anatomical appearances of the alimentary canal, ascertained after death, with the functional derangements which frequently occur from the commencement. Scrofula is comparatively little fatal; but, when fatal, the same ravages of disease are observed as in matured tuberculosis; in truth, as repeatedly urged, before a case of scrofula, at first a local and external affection, becomes fatal, if it pursue its natural course, it matures itself into a case of advanced general disease of the blood or confirmed tuberculosis.

The affections of the mucous membranes, to which individuals are liable whose blood is tuberculous, consist of increased vascularity, irritation, inflammation, thickening, ulceration without the deposit of tubercle, the deposit of tubercle succeeded by ulceration, mammillation, softening, contraction, and perforation. The different portions of the mucous membranes are subject to each and all of these affections in very different degrees, and the character, progress, and termination of these morbid processes vary greatly, according to the age of the individual, the structure and function of the part, and the maturity or immaturity of the disease of the blood. Taking the different portions of the mucous membrane *seriatim*, I commence with

THE PITUITARY MEMBRANE.

In the slighter shades of tuberculosis, this membrane is extremely liable to muco-purulent discharges. In the vicinity of the external surface, tuberculous ulceration without the deposit of tubercle; in its more deeply-seated parts, ulceration and tuberculous deposit are met with. Chronic inflammation of the mucous membrane of the nasal fossæ is a somewhat frequent affection; and I have found the antrum itself loaded with concrete tuberculous pus. There can be no doubt that many cases of ozæna and disease of the antrum, some of those, for instance, narrated in Bordenave's memoir,(a) take their origin in tuberculous ulceration, with or without the deposit of tubercle in its lining membrane.

THE EPIGLOTTIS, LARYNX, AND TRACHEA.

The mucous membrane of the whole respiratory tube is liable to be more or less reddened; in severe cases of tuberculosis of the internal organs, and in tuberculosis pulmonalis, the discoloration occurs principally on the side which corresponds to the lung most affected. Louis never met with tubercle deposited in this part of the respiratory canal. Hasse, however, mentions numerous miliary tubercles being sometimes discernible in the submucous tissue. Tuberculous ulceration is, nevertheless, very common. Louis found the epiglottis ulcerated in one-sixth of his cases of phthisis, the larynx in one fourth, and the trachea rather more frequently still. Ulcerations in the epiglottis are most common on its inferior surface, spreading round its margin to the front; and Louis accounts for this also by that portion being most frequently brought into contact with the sputa. The epiglottis has been known to be totally destroyed. The whole organ is sometimes much deformed by tuberculous disease, and bound down to the thyroid cartilage by thickened and degenerated cellular tissue.

The mucous membrane of the larynx and trachea is also liable to be reddened, thickened, eroded, or ulcerated. Ulceration of the larynx and trachea sometimes begins simultaneously with the deposit of tubercle in the lungs, but, in a greater number of cases, tubercle is first deposited in the lungs. Hasse states, as a remarkable fact, that ulceration in this situation occurs principally between the twentieth and thirty-fifth years, being far less frequent in advanced life, and rarely observed before puberty; Portal alone recording an example in a girl of eight years. According to Louis, males are more subject to it than females, in the proportion of two to one.(b) Thus it would appear, that these affections are most common when the disease of the blood is at its height.

Louis states, that ulcerations of the windpipe progressively increase in frequency from the epiglottis to the lungs, but Hasse, while remarking that tuberculous ulcers progressively diminish from above downwards, states, that true tubercular lesions have their seat mainly in the larynx, and are rarely met with in the epiglottis and trachea exclusively of the larynx. This apparent discrepancy is explained as follows:—

This pathologist distinguishes between—

1. *Simple Erosions of the Mucous Membrane.*—These are principally met with in parts which come in contact with tuberculous matter, and are the sequence of superficial irritation of the mucous membrane. They are always superficial, nearly of a uniform size, rather oval shaped, about the size of a lentil, except when several have coalesced; their base is for the most part smooth and pallid, seldom slightly reddened, frequently covered with a thin, whitish, soft pellicle, their edges sharp and linear, whitish, or reddened, or scarcely discernible, and the surrounding mucous membrane very often quite pale. These erosions are more frequent than ulcers. They occur in tuberculosis pulmonalis, similar ones being met with in other mucous surfaces. The muciparous glands are also sometimes affected independently of tubercle; they appear as white granules, about the size of mustard-seeds, in the midst of highly injected mucous mem-

(a) Treatise on Diseases of the Chest. Translated by Dr. Forbes. Third Edition, p. 336.

(a) On Surgical Diseases of the Head and Neck. Syd. Ed., p. 146.
(b) Path. Anat., Syden. Ed., p. 356.

brane; they soften and leave excavated pits in the place of the granules. Hasse refers them to the influence of catarrh grafted on tubercle.

2. *True Tuberculous Ulcers.*—As before stated, Louis disputes the tuberculous character of the ulcers. Hasse affirms, that the generally well-marked tuberculous granulations within them, and the determinate character of their microscopic elements, remove all doubt as to their true origin. They are most frequent in the larynx at its upper half, and at the posterior and anterior angles of the vocal chords, but often occupy the whole inner surface of the organ; sometimes they extend considerably above and below, even to the pharynx, œsophagus, and bronchi. They are larger than the former, irregular in shape, prone to deepen quickly; their base is rough, as if gnawed, and the submucous texture thickened and hardened; their edges are prominent and abrupt, irregular and angular; although, when recent, they are more uniformly circular, having smooth, pale bases, with regular flat and soft edges, their circumference being pale, and formed of mucous membrane, and, if chronic, sometimes greyish, or of a deep red. At their bases, grey or yellow tubercular granulations are frequently discernible. Tuberculous ulcers here, as elsewhere, invariably tend to spread, both superficially and in depth, owing to continual fresh deposition, aggregation, and softening of tubercles at their margins and bases.

Hasse thus explains the formation of tuberculous ulcers in the mucous membrane. Either tubercle accumulates within the capsules of the muciparous glands, elevating them, softening, and ultimately leaving corresponding ulcers; or, the tubercle is deposited in the mucous membrane: instead of normal cells, tubercle cells form beneath the epithelium cells, crowd together, in part reach the surface, and are shed; in part irritate the contiguous textures producing, first, loss of substance, and afterwards ulcers. Sometimes they are more deeply seated.

When tuberculous ulceration descends, the subjacent textures are liable to undergo changes. The perichondrium and cartilages ulcerate, but, previously to this process, a deposit of phosphate and carbonate of lime generally takes place between the perichondrium and cartilage. This deposit previously appears in the shape of irregular, rough little scales, which progressively enlarge and encroach upon the cartilage until this is destroyed,—one compact bony matter having assumed its place. This change most frequently occurs in the posterior portion of the cricoid cartilage; next in frequency in the thyroid; far more rarely in the arytænoid cartilages. Of this kind of ossification, four cases only are known to have occurred in the epiglottis, but Hasse frequently found the rings of the trachea and bronchi thus transformed.

These ossified cartilages are liable to ulceration both from without and within. In the first case, minute ulcers penetrate till their base is constituted by the denuded perichondrium; tubercle is deposited, softening, and ultimately exposing the subjacent ossification, which then gradually crumbles away. In the second and rarer case, tubercle is generated immediately within the cellular spaces of the ossified cartilages; softening producing caries, an abscess forms, and opens into the larynx.

Ulceration sometimes reaches the cartilages before they have become ossified; and Hasse states that he has more than once found tubercle deposited between the cricoid and one or more arytænoid cartilages, when no true ulcers were observable in the larynx. Louis, although denying the formation of tubercle in these parts, found the cartilaginous rings of the trachea occasionally completely denuded, attenuated, and partially destroyed. In five cases the mucous membrane of the trachea from one end to the other of its fleshy part was completely destroyed; in one case the cartilaginous rings were cut through. Large sized ulcerations exhibit themselves more frequently in the posterior than in other parts of the trachea, a circumstance ascribed by M. Louis to the constant passage of the sputa.

Rare examples occur of ulcers in the back part of the larynx, extending to and perforating the œsophagus.

Not only is it rendered clear, that ulceration in the upper respiratory passages is a pathological condition proper to tuberculosis; but that tubercle is occasionally deposited in this situation, and although, doubtless, acrid sputa proceeding from ulcerated lungs will always aggravate and perhaps frequently induce the ulceration above, there are still independent causes of this ulceration in the local influences to which the parts are subject, and the tuberculous state of the blood.

The Bronchi.—Regarding tuberculosis in the general sense, in its different stages and degrees, and in the varieties which it presents in its symptoms, course, and termination, the bronchial tubes constitute a very important anatomical element for investigation. Exposed to the influence of the external air on the one hand, to the circulation of arterial blood in their parietes, and to the immediate influence of the mixture of venous blood and chyle on the other hand, and taking their rise from the air vesicles of the lungs, there can be no surprise that they should present a great variety of pathological appearances. Hence we find enumerated, increased redness, puffiness, thickening, secretion of purulent mucus, erosion, and ulceration of their mucous membrane; obliteration of their minuter tissues, dilatation of their larger branches, plugging of their calibre with tubercle, and the deposit of tubercle under their mucous coat and in the depth of their parietes. Pathological anatomists appear to have found greater difficulty here than even in the upper parts of the respiratory tube, in distinguishing between primary tuberculous affections and those which result secondarily from the deposit of tubercle in the lungs.

Louis found ulceration more frequently in the bronchi than in the trachea, and much more frequently in men than in women. He found those bronchi only which communicate with or are seated in the immediate vicinity of cavities exhibiting signs of violent inflammation. Tubercles with yellow or grey semi-transparent granulations are so infrequent, that Louis laid it down as a law of the system, that they are never produced in the bronchi after the age of fifteen; but exceptions to this rule have been detected since. Andral states, that the mucous membrane of the bronchi is frequently the seat of tubercle.

The tunics of the bronchial tubes are sometimes infiltrated with tubercle. In one case, where the lung contained tubercles, Louis found a tuberculous false membrane in the interior of one of the bronchi, easily separable from the subjacent mucous membrane, which had retained its natural whiteness, thickness, and consistence. Louis maintained, that ulceration is generally seated in the bronchi leading from cavities in the lungs, and is produced by the sputa; and he remarked, that the membrane frequently retains its white colour before tubercles soften in the lungs, and then becomes reddened. But subsequent observations by pathologists of immense experience have left no doubt that the bronchi are sometimes ulcerated without cavities; and it is now admitted that tubercle is sometimes deposited primarily in the structures constituting the parietes of the bronchial tubes.

Bronchial tuberculosis is, however, met with, especially in children, and is commonly accompanied with most extensive tuberculous disease of the bronchial glands. Rokitanski says, "it is a disease of the terminal branches of the bronchi,—at least it developes itself originally in them, and extends from them into the larger tubes. It occurs especially, like pulmonary tuberculosis, in the bronchi of the upper lobes, but is contrasted with phthisis, in that it is frequent in the peripheral or superficial ramifications, affects a larger section of the bronchial tree, and that, on a transverse section, the pulmonary parenchyma is found traversed by large, thickly-walled, bronchial tubes, filled by caseous tubercular matter. It is often combined with tuberculous infiltration of the pulmonary parenchyma, but often is completely independent. In the latter case, the obstruction of the bronchial tubes leads to obliteration of the vesicles, and wasting of the parenchyma connected with them, and then the obstructed tuberculous bronchi branch into a ligamentous, shrivelled, elastic, and tough tissue. The tuberculous matter, in these cases, passes through its usual changes. It either softens, and then the bronchial walls are not infrequently destroyed, and involved in collections of tuberculous pus,—collections in which (contrary to those which are far more frequently formed by softening of pulmonary tubercle) the destruction of the bronchi is the primary change; or else the tuberculous matter undergoes the calcareous metamorphosis, which is especially apt to occur when the bronchus has been completely closed by tubercle.

This description, as remarked by Rokitanski's reviewer,(a) is the more important, because it affords a correct account of that tuberculous disease of the bronchi in which Dr. Cars-

(a) *British and Foreign Review.*

well has, far too exclusively, made ordinary phthisis to consist; and of which others, with an equally unfounded exclusiveness, have denied the existence.

THE MUCOUS MEMBRANE OF THE MOUTH AND FAUCES.

This part of the mucous membrane is frequently reddened, and occasionally ulcerated. The ulcerations are referred to apthæ by some writers, and are called erosions by others; they are generally small, shallow, elongated, or rounded, or stripe like, with slightly concave bases; sometimes they are scarcely discernible, appear raw or excoriated, pale or dark red, are uncovered or covered with a creamy diffluent exudation, and are surrounded with a livid redness, or a sharply defined red areola. They generally extend into the fauces and mouth from the larynx and trachea, where similar erosion occur, and are most frequently seated on the side where one of the lungs has been most extensivly or most severely diseased.

OF THE TONGUE, THE PHARYNX, AND THE ŒSOPHAGUS.

The mucous and submucous tissues of these parts frequently exhibit increased vascularity, and in a few cases they are thickened and ulcerated. Hasse once detected the tongue studded from root to point with little ulcers, evidently tuberculous. Ulcers are occasionally observed in the pharynx. Louis found them numerously scattered and small in four cases among 120 subjects. The œsophagus was ulcerated in six cases, and Hasse found ulceration extending from the posterior surface of the epiglottis to the œsophagus. Rokitanski states, that tubercular deposits rarely, if ever, form in the œsophagus, and he gives a caution against confounding their existence here with tuberculization of the neighbouring glands. The lower part of the œsophagus was softened and attenuated in three of Louis's cases, the disease affecting all the tissues and extending to the stomach.

[To be continued.]

LECTURE
INTRODUCTORY TO THE LONDON COURSE OF MEDICAL STUDY.

MIDDLESEX HOSPITAL.

By S. J. GOODFELLOW, M.D., M.R.C.S., D.S.A.

(Concluded from page 481.)

The next great discovery in the nervous system, for the light it throws on practical medicine and surgery, is even still more valuable than that of Sir C. Bell—I allude to that relating to the true and distinct function of the spinal cord. I have already said, that previous to Sir C. Bell's discoveries, the spinal cord was held to be merely a prolongation of the brain, and endowed with common properties with it. It was long regarded as no more than a bundle of nerves, or one large nerve, I may say, proceeding from the brain, and emerging at various points of the vertebral canal, to be distributed to their destined regions. The large amount of vesicular matter, and its varying, quantity according to the bulk of its segments, were entirely overlooked.

Although the phenomena which are now regarded as belonging exclusively to the spinal cord had been noticed long before the time of Gall, as *e. g.* to Prochaska and to Whytt; yet he appears to have been the first who adduced best proofs from anatomy to show that the spinal cord was *not* a mere appendage to the brain, but a special centre in itself. His principal arguments were derived from the want of any constant proportion in bulk between it and the brain, the spinal cord being small with a large brain, as in man, and large with a small brain, as in the inferior mammalia and in the vertebrata, and from the fact that it does not taper gradually as it gives off nerves. On this point, also, Sir C. Bell, the founder of scientific neurology, as he has been justly termed, by "clearly marking out the distinction between the respiratory and voluntary movements, had given a most important indication." It would be unjust to the older physiologists not to allude to their share in the discovery. That both Whytt and Prochaska observed that a certain series of actions was still capable of being developed through the instrumentality of the whole cord or any portion of it, the nerves of which may remain uninjured both as to their central and peripheral connexions, there can be no doubt. The latter of these eminent men, who were so very far in advance of their age, remarked, and has related the fact, that when the hinder toes of a frog are wounded immediately after cutting off its head, there is either no motion at all excited in the muscles of the legs, or a very inconsiderable one; but if the toes of this animal be pinched or wounded with a pen-knife ten or fifteen minutes after decollation, the muscles, not only of the legs and thighs, but also of the trunk of the body, are for the most part strongly convulsed, and the frog sometimes moves from one place to another. The very fact of his noting and relating this shows clearly that he must have been aware of certain actions independent of the brain, since he describes them to have taken place after decapitation; but I think it is equally clear, by his observations with regard to the facts mentioned, that he was not aware that these actions were *independent of volition and sensation*. He no doubt regarded the spinal cord as a prolongation of the brain, and he attributed them no doubt to the influence of the mind, which he appears to have thought pervaded all parts of the body. It is, however, to Dr. M. Hall that we are indebted for the revival of these observations, and for discovering that these physical nervous actions are entirely due and essentially belong to the spinal cord. This power in the cord exercises a wide influence on the phenomena of living creatures, and medical science has been greatly enriched by this discovery. It would be out of place here to enter into controversial matters, and I shall confine myself, therefore, as much as possible, to pointing out how practical medicine has been promoted by this discovery of the reflex power in the cord; and for this we are indebted chiefly to the labours of Dr. M. Hall. In saying this, I must not omit to pass a eulogium, which is eminently due to Dr. Todd and Mr. Bowman, for their labours in this field of inquiry, and especially to the former, for his elaborate and learned essay on the nervous system in the "Cyclopædia of Anatomy and Physiology." Before Dr. M. Hall's discovery, physicians had been, from a very remote period, familiar with the fact, that severe affections, as *e. g.* convulsions, were sometimes entirely brought on, or at others exacerbated, by the presence of irritating matters in the stomach or intestines, and by dentition; and the practice was in force of removing these irritating matters in the one case by laxatives, and the pain and irritation accompanying the eruption of the teeth, in the other case, by lancing the gums. This practice was, however, entirely empirical. No clear conception was entertained of the precise way in which these sources of irritation acted, nor of that by which the remedies were effectual in removing the convulsions, until his discoveries. He it was who placed this on an intelligible footing. He divided—and his division is a natural one—nervous morbid actions into two kinds, namely, 1st., into those which affected the brain, the seat of intelligence, volition, and consciousness; and, 2ndly, those which had their seat in the spinal cord and medulla oblongata, considered as a special centre. These last he again subdivided into reflex or eccentric, and into centric—the latter comprising those which arise from any source of irritation in their true special centre, as a morbid condition of the blood, as in asphyxia, poisoning, &c., the irritation of an inflamed arachnoid, or of effusion of a tumour, or of exostosis of the spinal canal, &c.; the former, or eccentric, or those acting upon and through the centre, including those arising from the application of any causes of irritation to the *incident* nerves, producing reflex actions, as in the case of dentition, where the irritation is in the gums. In this case the incident nerves, or those going *to* the spinal cord and proceeding *from* the gums, the stomach, and from the intestines, denote the several sources of this malady; the condition of the hand, the foot, the larynx, and the diaphragm, and other muscles of inspiration, the gall-duct and ureter, and the sphincters of the rectum and bladder, denote the affection of these parts of the system through the medulla oblongata and the medulla spinalis, and the reflex nerves; and, lastly, the brain becomes secondarily affected by congestion, as *the effect* of general convulsion. Thus, how clearly does this theory enable us to give a *rationale* of all the symptoms marking an attack of convulsions from dentition.

Another good example of a reflex or eccentric morbid action is to be found in that terrible affection, tetanus, or

locked-jaw. The explanation of the development of this fearful malady, according to the reflex theory, is as follows.—A wound in the sole of the foot or ball of the thumb, or in some other situation favourable to the maintenance of prolonged irritation, is capable of exciting, through the incident or centripetal nerves, a particular region of the spinal cord, from which the state of excitement spreads so as to involve not only the whole cord, but part of the medulla oblongata also; and in this state a large proportion of the motor nerves participate, so as to induce tonic contraction of the muscles they supply. Intestinal irritation is capable of producing a similar condition, which, if the irritation have not been allowed to remain too long, may be speedily removed by getting rid of the irritating cause. A striking instance of this is related by Dr. Todd:—"An unhealthy-looking girl, about 15 years of age, was brought into King's College Hospital, suffering from severe tonic spasms of the muscles of the spine and lower extremities. The spasms were so powerful as to produce successive paroxysms of opisthotonos, during which the trunk became bent like a bow, so that she rested on the back of her head and on her heels." Now, this painful and alarming attack of idiopathic tetanus was speedily removed by the use of a large clyster containing turpentine, which brought away the offending and irritating cause, viz., a large number of worms, from the intestine.

From our present knowledge of the nervous system, we are enabled, in affections of the nervous centres, to localize the sources of the phenomena presented to us. If there be much delirium, we conclude that the grey substance covering the hemispheres is directly or indirectly affected; if sensibility be impaired or lost, that the optic thalami are the seats of the lesion; if voluntary motion be impeded or suspended, that the corpora striata are the parts involved; and, lastly, if there be spasm of the glottis, difficult deglutition, or irregular acts of respiration, we at once refer them to some affection of the medulla oblongata. These, with others which I have not time further to detail, are some of the important results of discoveries made within the past few years. But these, great and important as they undoubtedly are, are comparatively small when contrasted with what the application of the microscope and organic chemistry to the structure and functions of the organs and tissues of the body has placed within our reach. The scientific precision lately given to our knowledge of many diseases by the employment of new methods of investigation, and the discoveries arising from them, is very striking, when compared to the vagueness and uncertainty of former days. By our increased knowledge of the intimate structure of the liver and kidney, for example, we are enabled to appreciate abnormal states which the pathologists of former days would in vain have looked for under the old methods of investigation. It was impossible, in most cases of disease of these organs, except there was complete change of structure, or alterations of form, or disorganisation, had taken place, to connect the symptoms during life with the states of these organs after death. The great source of difficulty, in detecting morbid changes sufficient to account for death, and the cause of numberless instances where no sufficient cause could be found, was owing, no doubt, to not knowing the intimate structure of organs, and to not using the microscope in their examinations. It is impossible to explain or understand the morbid appearances of such organs as the liver and kidney, for example, without reference to their intimate structure. It has been truly said (Budd), that, "in an organ whose texture is spongy as the lung, disease produces such striking changes, that we can at once distinguish their different forms, and thus learn to connect them with the symptoms observed during life; but, in organs naturally solid, and also nearly of the colour of the blood, as the liver and kidney, these changes, and especially the traces of the various kinds of congestion and inflammation, are far less obvious, and to detect and discriminate them requires a knowledge of their intimate structure which has only lately been obtained; and, even *with that* knowledge, a very close and minute inspection. We are indebted almost entirely to the complete and philosophical researches of Mr. Kiernan and Mr. Bowman for our present knowledge of the intimate structure of these organs; and since their important discoveries—the one on the structure of the liver, the other on that of the kidney—changes (of structure) have been detected which previously completely eluded the examination of pathologists, and an explanation given of various mortal diseases with a precision and particularity equal to that of any fact in natural science. For example, let us take adhesive inflammation of the liver—or cirrhosis, as it is called—what was the state of our knowledge of this disease, and the consequences to which it led after a longer or shorter period, before Mr. Kiernan's clear elucidation and explanation of them. All was doubtful—nothing was clearly known about it, although it was very commonly found. But mark the contrast. *Now* the *development* of this affection can be traced step by step from the first commencement of inflammation up to the thickening of the areolar tissue, the consequent pressure upon the minute twigs and branches of the portal vein, obliteration of the lobules, interruption to the portal circulation, retardation of the blood in the intestinal veins, ascites, and ultimately death. Mark the successive gradations, which, although there may be slight modifications or differences in the processes by which these changes are effected in different cases, according to the causes which may have been instrumental in producing them, yet are substantially the same, and known and traced with a certainty and precision unknown in pathology before Mr. Kiernan's researches. Let us again direct our attention to another disease of this organ—fatty degeneration; which, however, is not a fatal disease, because it seems not to interfere much with the function of the liver; for the colouring and other matters of the bile which would be detrimental and poisonous to the system are secreted, and pass off as usual. There is no jaundice—no congestion of the veins that feed the vena portæ—no obstruction, therefore, to the circulation through the liver; no pain or tenderness, such as are the case in the former disease. The outward characters of this disease have been long familiar to pathologists, and were ascribed to the interstitial deposition of uncombined fatty matter in the substance of the liver; but it was not known precisely in what state or in what parts of the organ the fat was deposited, until Mr. Bowman discovered, by microscopical examination, in 1841, that it existed in the form of oil globules in the hepatic cells. There is another organ prone to a similar condition,—namely, fatty degeneration,—which, so far from being so innocent in its nature, is a very frequent cause of sudden death. I need scarcely say that I allude to fatty degeneration of the heart. In this case the microscope has revealed to us the exact seat of the fat, which is found to take the place of the essential element of muscular contractility. This information at once lays open to us the cause of death,—the heart loses the power of propelling the blood to the brain and spinal marrow, and the system at large,—the organs are insufficiently supplied with arterial blood; their vitality diminishes, and, on any sudden and unusual exertion, the heart is inadequate even to propel the blood to this extent; its action stops, and mortal faintness is the consequence. Time warns me that I must not more fully enter upon the light which has been thrown upon medical science by minute investigation; but I will venture to occupy your attention for a few minutes in illustrating what I have stated by one other example furnished by the kidney, an organ which closely resembles the liver, in having a double circulation within it. The anatomy of this organ has been so clearly made out by Mr. Bowman, that it forms one of the most finished labours even of the past few years, teeming as they do in other discoveries of the same kind. The secretion of urine, and the share which the different parts of its structure successively perform in it, are now as plainly seen by the understanding as if the process took place before our eyes. Already has this elucidation of the minute structure of this organ been the means of clearing up uncertainty, of dispelling a number of unsupported hypotheses, and of substituting a true and lucid explanation of diseases of great interest. It was reserved for a physician of our own day to connect certain appearances found after death with certain states of the urine during life, which afforded a sure indication that death must take place at no distant period. The exact changes, however, were not known until Mr. Bowman's researches into the minute structure of the organ. Not only have his inquiries enabled us to trace the sequence of actions which characterise the progress of the disease, but to discover that it included three different forms of disease, one of which is very different, in every respect, from the other two—namely, acute and chronic desquamative nephritis, and fatty degeneration. By the microscopical examination of the urine during life, these several states may be detected with a precision and a certainty unknown in the investigation of disease in former times. In desquamative inflammation of the kidney, for

example, blood-corpuscles, with epithelial cells in great numbers, partly free and partly entangled in cylindrical fibrinous casts of the urinary tubes, and very commonly crystals of lithic acid, may be seen; and in fatty degeneration, in addition to these, we have, what is characteristic of the disease, the presence of oil in the epithelial cells, which are more or less distended with it. We hence distinguish this disease from the two forms of desquamative nephritis, and are enabled to form a certain prognosis during life as to the event; in the one case, the patient *may* recover; in the other, on the contrary, general dropsy, sooner or later ending in death, is the invariable result. Thus, as has been truly remarked, "it is as important to distinguish between acute and chronic nephritis and fatty degeneration of the kidney, as it is to distinguish acute pneumonia or chronic bronchitis from tubercular disease of the lungs; and the diagnosis of renal disease may be made with as much ease and certainty by a microscopical examination of the urine, as that of pulmonary disease by auscultation and percussion of the chest." The appearance of the epithelial cells in this formidable disease leads me to the consideration of a discovery, which, for its important practical consequences, is equal to, if it do not surpass, any other, either in ancient or in modern days. I allude to that of cell-formation, for which we are indebted to Schleiden and Schwaan. If we except Hunter, whose genius led him in advance of his age more than half a century, there were two leading errors among physiologists with regard to the dependence of organisation on the circulation,—one class affirming, that parts wanting vascularity, like the epidermis or scarf-skin, were therefore inorganic; whilst the other, objecting to the position that any part of a living body could be otherwise than organised, contended that the vessels were the only agents by which this could be effected. Hunter clearly saw that the living principle exists in the several parts of the body, independently of the influence of the brain and of the circulation. At the present day, this is sought to be *educed as a principle*, the enunciation of which is, that organisation is essentially and invariably independent of vascularity—"that in all organised beings, whether vegetable or animal, vascularity is secondary and subordinate, not primary or essential: that it may, therefore, be altogether dispensed with, as it is affirmed as the fact not only in the lower plants and animals, where the absence of vessels is admitted, but also in the early embryonic condition of all, including the highest classes of animals, the human being forming no exception. It fully explains what is also maintained, "that in morbid processes, involving acts of assimilation, deposition, and absorption, the agency of the vessels is, as in the normal state, indirect, and in subjection to other and preceding processes." In saying this, it must not be understood that the important actions which take place within the vascular system, and the share which they take in organisation, are undervalued. Not at all; these actions are better understood now than at any other time, and have a significance which they never had before. In establishing, however, this great principle of the independence of all the processes of organisation on vascularity, one most important element was wanting, namely, an apparatus superadded to the vessels, which were previously supposed to be the immediate agents of all secretion, absorption, and nutrition. This apparatus the great discoveries of Schleiden, Schwaan, and Henle have revealed to us. They have shown that *wherever* secretion, absorption, or nutrition was going on, *there* was organic membrane interposed, generally in the form of nucleated cells. These discoveries, taken with that of Dutrochet,—that, if two liquids of different densities, and not inclined to combine chemically together, be placed on the opposite sides of a thin organic membrane, a double current is set up,—fully explain how these functions are accomplished.

These two discoveries have then supplied the link that was wanting. There can be no question,—it has been proved to demonstration by the researches of Roskingi, who first propounded the doctrine which Henle adopted and carried out, and which Goodsir and Bowman have fully confirmed,—that these cells are the real agents of secretion, absorption, and nutrition, which processes are all intimately associated together, and more or less dependent on each other. These cells are the first forms that are seen in the early embryo, they form the first elements of every tissue, and they enact the same important processes in vegetative as in animal development and growth. It is impossible as yet to imagine what will be the full results of this discovery to physiology and practical medicine; and the mind is lost in amazement at the wonderful properties possessed by these *apparently* insignificant forms. What is most calculated to excite our surprise is, the elective choice which these minute forms exercise; that while the composition of their walls is apparently and chemically the same, they are *potentially* different, separating from the blood the constituents of bile in the liver, those of urine in the kidney, and of chyle in the intestines and mesentery. It has been remarked by a writer on this subject, that the contents of the cell-cavity have no relation whatever to the material of the cell-wall. Of this we have a remarkable example in the case of the algæ where the contents of the cell-cavity are green; those of hæmatococcia bright red; and in the simple fungi, such as the torula cerevisiæ or yeast plant, they are colourless,—the contents of the two former being simply ternary compounds of water and carbon, the cell-contents of the yeast plant being closely allied to the protein compounds; and yet the cell-walls in both instances are composed of the same material—*cellulose*. There is one important fact, however, regarding secretion, that in all glands they exhibit a certain type or character, which, from their constant presence in these organs, physiologists have given to these cells the name of glandular epithelium.

Besides clearing up the mist that so long hung over the process of secretion in glands, the offices of which were to a great extent made out, such as the liver, the kidney, and others having *excretory ducts*, by the theory of cell-secretion, the offices performed in the economy of what are called vascular glands, such as the spleen, the thymus and thyroid glands, and supra-renal capsules, which have no excretory duct to direct us to the discovery of their function, already loom in our mental view. The processes performed by these bodies correspond so completely with the secreting operations in their general nature, as to render but little doubtful that they are true secreting glands. They are provided with what we have already found are the instruments by which secretion is effected, namely, cells,—the only difference being, that they are unprovided with excretory ducts for the discharge of the product of their operation. These products, instead of being carried *out* of the body, are destined to be *restored* to the *circulating* current, apparently in a state of more complete adaptiveness to the wants of the nutritive function; or, "in other words, these vascular glands are concerned in the assimilation of the materials that are destined to be converted into organised tissues, instead of being the instruments of the removal from the body of the matters which result from the disintegration or decay of those tissues." These cells, then,—so apparently insignificant,—are the agents in building up the superstructure of the body,—these, imbedded in a matrix, and in the condition of simple molecules, in which, with the highest amplifying power which we can bring to bear upon them, we are unable to detect any distinction of parts, are endowed with a potential agency which scarcely any external influence can modify. By their original endowments, stamped upon their organization, as if by the fiat of the Creator, they assume a definite direction in their future development and function which no external agency can divert,—the one set to construct the brain and nervous system; another, the osseous fabric; and another, the muscular; and so on in all other structures of the body. Such is a brief and, I fear, a very unsatisfactory account of some of the principal discoveries in physiology which have been made, chiefly by the assistance of the microscope, within the past few years, teeming as they do with others of great value to practical medicine and surgery.

Time will only permit me just to allude to the great assistance which organic chemistry has also contributed to the advancement of physiological and medical science. In the words of a highly esteemed physiologist, (Grainger—Hunterian Oration,) "Owing to what organic chemistry has unfolded to us," we have a much clearer insight into the relations and interdependencies existing between the vital power and the molecular and chemical constitution of their organic instruments than had hitherto ever been obtained. Thus, in the vegetative existence we can distinctly trace the new organic matters introduced into the interior of the system through many, and in not a few instances through all, their manifold and important changes, till at length, having served their purpose, and constituted for a time a component part of the machine, they are cast out to be re-

placed by new supplies. That there is an incessant molecular destruction, or, to speak more correctly, mutation of the living body, is, indeed, no new truth, since it has been known from the infancy of science. "Life," to borrow the eloquent language of Cuvier, "is a continual vortex, of which the direction, all complex as it is, remains constant, as well as the kind of molecules propelled by it; but not so the individual molecules themselves; these change without cessation, so that the actual matter of a living body, although it is the depository of forces which will constrain future matter to march in the same direction with itself, will soon be there no longer." But it is a very different thing to know the general fact of this eternal change, and to be able, as we now are, by the aid of organic chemistry, to trace each act of the metamorphosis—to be able precisely to define what becomes of the saccharine and fatty principles of the food — to be able to follow the albuminoid matters, the phosphorous, the earthy, the alkaloid, and the metallic salts—to have a clear perception to what particular class of organs they go – how they are used up in the production of different kinds of force, or in the formation of various secretions; and, finally, to find in the very *débris* and excreta of the body the sure and certain measure of the vital action itself. It is a great fact to know, that no force is generated, that no heat is evolved, that no motor power is produced, that no nervous action takes place, nay, that even no thought passes through the mind without equivalent changes in the form of the organised materials of the frame. The physiologist obtains hereby a clearness of conception as to the most occult processes of life, which is strongly felt by all who possess it, but which, in the absence of all the extended knowledge out of which it springs, is difficult to convey to others by mere description. He is, for example, by one simple distinction, thus enabled to separate the multitudinous organs of the animal body—leaving out of the category, for the moment, the mere preparing organs, like the glands—into two broad and distinct classes, according as they are the generators, or the mere recipients or transmitters of force; he readily recognises the cause of the large supply of blood sent to the produce of the motive force, the muscle, and the comparative absence of vascularity in the mere passive organs of locomotion; and in this way is prepared for that beautiful instance of design revealed by the microscope – the looping back and the return of the blood-vessels, when, reaching the end of the muscle, they refuse to enter its tendinous appendage; and further, even when passing to such a subordinate group of organs as the bones, cartilage, and tendons, he finds, in the precise parts they have respectively to perform, the reason of the varying supplies of nutrient matter they demand and receive. All these principles, which have given an interest and a meaning to chemistry, as applied to the analysis of animal structures, it never before possessed, are among the highest truths of organic science; and it is now plainly seen, must in all subsequent time constitute one of the prime means of interpreting vital phenomena, whether these be healthy or morbid.

Such is a brief *résumé* of what organic chemistry has done for physiology and medicine, and is still calculated to do, and there can be no doubt that every year will be marked with fresh proofs of the power of organic chemistry still further to elucidate the composition and functions of the tissues and organs of the body. I would earnestly impress upon those present, who are now passing their pupilage in this hospital, the great importance of making themselves acquainted with the present state of physiology; and one great object in bringing before you a few of the great discoveries in this branch of science during the past few years, is to place before you the great influence which these have exercised in advancing our knowledge of practical medicine. I look upon it, that physiology forms the most substantial, indeed, I may say, the only true, foundation of medicine and surgery, and that, without a knowledge of it, it is impossible to understand the principles of either. The more extensive our acquaintance with the actions of the body in a state of health, the more competent shall we be to detect and to appreciate any alterations on them occasioned by disease; and for a proper understanding of physiology, we must be accurately and practically acquainted with the intimate structure of the organs and tissues of the body. Believe me, the labour of studying the minute structure of organs is much over-rated; but, whatever it may be, it will be amply repaid to you in the pleasure and value of the knowledge so possessed. There is such a beautiful simplicity in these structures, and such a close general resemblance, that the difficulty is only felt at the commencement. In a short time, the mists with which you first found yourselves surrounded will one by one clear away, and you will be surprised and delighted at finding the simplicity and unity prevailing.

In former days (I speaking of twenty years ago), the method then in practice of studying anatomy was peculiarly uninteresting and forbidding. The memory was burdened by a number of unconnected facts, having no reference to any physiological, or even surgical application. Now structure and function are so associated as to give the study of it an ever-increasing interest.

As there are many here present who are now about to commence their studies at this school, I should wish to engage their attention for a few moments. It would be altogether unnecessary to state here the regulations of the College of Surgeons and the Apothecaries' Society, since you will have to make yourselves acquainted with them through the ordinary channels of such information. Both the College of Surgeons and the Apothecaries' Society very wisely lay a great stress upon the study of anatomy and physiology; and the latter body, to which the medical profession, as well as the public generally, owe a deep debt of gratitude for the very great improvements which it has been the means of introducing in medical education, has issued a curriculum which, in all its parts, is the most perfect that could have been framed, and a copy of which I would advise each of you to procure for yourselves: I would recommend you also attentively to read the preface to it. You can have no better general guide. And now, gentlemen, with regard to the relative position of lecturers and pupils at this school, we are fully sensible that we should be imperfectly acting up to the spirit of the regulations of the licensing bodies, if we allowed our duties to the pupils to terminate in the lecture-room. Not that we would undervalue the utility of lectures: they are no doubt of great use,—indispensable, in fact,—as affording an opportunity of bringing the subject in a connected form, and in its totality, before the student. But, in addition to lecturers, we wish to be regarded in every respect as your teachers,—your tutors,—ready and anxious to assist you under all difficulties,—to explain subjects which you find any difficulty in understanding,—and to make our explanations clear to you by dissection, experiment, microscopical examination, as the subject may require. Lastly,—and in a word,—it is our wish to be considered by you in every respect in the light of older and more experienced friends.

ORIGINAL COMMUNICATIONS.

ON THE PREFERENCE TO BE GIVEN TO THE PHYSIOLOGICAL POSITION IN THE TREATMENT OF THE FRACTURES OF THE FEMUR, &c.

By S. THOMAS D'ALLEX, M.D., &c.

"Ars medica tota in observationibus:
Neque numerandæ sed perpendendæ sunt observationes."
MORGAGNI and BAGLIVI.

It may be assumed as a general truth, that all that can be said upon the various branches of the healing art, has been again and again expressed, save and except when an unusually acute observation, or what may be considered almost an inspiration, enables us, at rare intervals, to add in some degree to the solidity and extent of the Temple of Medicine —that temple which, in the eyes of the really well informed (whose candour equals their intelligence). has long since appeared a nearly perfect structure, filled with those incalculable treasures whose value science enhances when called upon to employ them in the cause of suffering humanity.

But, in truth, all admirable as is the Temple of Epidaurus, it is still capable of improvement; a stone or two may yet be added to heighten its magnificence, to increase its strength. Moreover, like all things of this earth, whatever their grandeur, whatever their strength, a jealous care

must provide against, and sometimes repair, the damages which false systems or medical heresies often inflict.

Therefore is it the imperative duty of every medical man to test closely the quality and the value of the materials he brings,—whether chance or laborious industry in the truly inexhaustible stores of nature has placed them in his hands; and let all be sure who labour in the good cause, that nothing is denied to intelligence and zeal, and with success comes a double prize—honour and profit. For, whatever may be said by the disciples of ignorance and ingratitude, or by those whom Nature has made incapable of comprehending great truths, Medicine is no less a daughter of Heaven than other studies; nor are its truths, though of another order, less capable of demonstration, or less precious, than those of mathematics or the more rigid and exact sciences.

Doubtless, truly, great physicians are sufficiently rare; but the same may be said of profound mathematicians, and of men deeply skilled in the more popular studies; and, in all cases, the rarity is due to the same cause. In medicine, the difficulty of excellence is not owing to the obscurity or uncertainty of its truths, but to the errors of those who, mistaking their vocation, forget that the maxim, "*Poeta nascitur, non fit,*" is as applicable to the successful pursuit of medicine as of the muse; moreover, however naturally gifted, the sacred fire of true genius will burn in vain, unless guided and supported by patient industry and diligent research.

Among the truths which form the healing art, there are some of such paramount importance, it is impossible to repeat them too often, either for the benefit of novices or their patients; such, for example, is the necessity which almost always exists during epidemics, of modifying general therapeutic laws, all immutable as they appear during ordinary seasons,—though the variation is never greater than these mysterious inflictions compel; and for so doing we have abundant authority in those precious histories supplied at various medical constitutions or epochs, by the Father of Medicine, by his most worthy disciples, and, beyond all, by the illustrious English Hippocrates, Thomas Sydenham.(a)

Moreover, it must be admitted, in the practice of medicine, that nothing is good or bad except in relation to its use; and the indiscreet, inopportune, or bigoted employment of the best remedy may, and frequently will, entail the most disastrous results. Examples of this abound in all places and all ages.

Another very great truth is that profound, that philosophic motto of the Sage of Cos, "*Quo vergit Natura, eo ducenda,*" to have urged which, even had he no other claim, would alone entitle him to endless honour and the eternal gratitude of posterity; for what supports us during the doubts, the difficulties, the fears of the sick man's couch; what leads our diagnosis; what strengthens our judgment; what arranges our plan, and what leads to the quickest and the surest cure, but this devout, this unerring truth.

It is thus especially the duty of the medical man to watch warily, and follow closely, the footsteps of Nature; to be her faithful and intelligent minister, and so give the best surety for the satisfactory discharge of the duties of his responsible post, and the safety of the patient, from whose interest no honourable or feeling man can ever separate his own. Nature, in short, is a benevolent autocrat, and can frequently dispense with any assistance from art; but of what avail are all the resources of art, if she be not kind?

Fully impressed, as I am, with the above truths, and desirous as I am of fulfilling my share of the honourable task imposed on every medical man, of extending as far as possible the bounds of practical knowledge, I propose giving, in this valuable journal, as briefly and early as possible, the results of an extensive and sufficiently fortunate practice during the past twenty-five years; and trust, in so doing, I may be permitted, at the same time, to bear my humble tribute to the splendid talents of the many illustrious men this immense city contains.

With respect to the great many cases of severe fracture, the cure of which has been speedily and completely effected by the physiological position, that is to say, by securing the greatest possible muscular relaxation, want of space prevents my reporting them in full. But as it may be most truly said, whatever their complication or severity: "*ab uno disce omnes,*" I shall content myself by selecting one case of recent occurrence and great interest, and to which I shall beg to append a few observations.

Upon the 31st July, 1850, Adèle Codron, aged seven years, residing at 233, Tottenham Court-road, in returning home from the Italian Opera, was run over by a carriage; one wheel passed over both thighs, the right was fractured in the middle, the left severely contused about one-third above the knee.

I was unable to see this interesting pupil of Madlle. Taglioni, until seven or eight hours after the accident. Upon my arrival I found her in a state of alarm more easily imagined than described, which in no degree abated until the fracture (which was the more severe for being oblique) was reduced and the limb properly supported. Her sufferings had been most acute during the time of carrying her home, and the least movement sufficed to renew the agony, especially in the right thigh, which was exceedingly swollen, and bore a deeply-set impress of the horse-shoe on the knee. Many other severe bruises upon various parts of the body, although painful, were not important.

I immediately desired proper bandages, starch, and card-board to be prepared, and, whilst this was doing, I took the opportunity of calling upon my learned and skilful friend, Mr. Quain, of University College. At first, upon my relating the particulars of the case, he said it was rather impossible my little patient would ever dance again, or ever realize the brilliant future justly considered due to her talents or very remarkable disposition. But after I had explained the treatment (which I had adopted successfully in so many cases, and pointed out the value of the physiological position), my candid and intelligent friend, to my infinite satisfaction, admitted a different prognosis. In fact, having since 1824 invariably successfully treated similar cases in this manner, I should have been as much astonished as grieved had I not succeeded in this.

As the best means of quieting the little sufferer, I hastened to apply my remedies (the coaptation of the fragments having been methodically made): 1st, a bandage lightly rolled from the great toe to the top of the thigh; 2nd, four pieces of card-board, of a medium size and thickness, properly softened by soaking in cold water during a few minutes, were formed into a kind of box, in which the limb being placed, were secured in position by a few turns of bandage, and stiffened with starch as usual. The patient was laid a little on her right side, with the limb bent in such a manner that the leg rested flexed upon the thigh, and this, too, inclined towards the abdomen at an angle of 40° or 45°.

The first two or three days and nights were passed very tranquilly, owing, probably, to the gentle influence of that excellent sedative, "acetate of morphia," given in doses of one-eighth of a grain, every three or four hours during the night, in a little simple syrup; and which, with two or three small doses of castor-oil, given during the first ten or twelve days, was the only inward remedy employed throughout the treatment.

Owing to the severity of the blow on the knee, I was obliged to displace and renew the supports on the fourth, the ninth, and the fourteenth day. But, at the end of the third week, convinced that nature had in no way been interfered with—on the contrary, had received every assistance in the excellent regimen followed by the child, &c., I dispensed with all supports, excepting a simple bandage properly starched; and such was the rapid progress made, four weeks after the accident, that I removed even this slender support, and allowed the young convalescent to be removed to a chair, the leg and thigh being supported, as in the bed, on a cushion conveniently arranged on a second chair; and the left limb quite at liberty.

In fine, before the end of the 4th week, it was clear the little Adèle could walk as well as before the accident, if fear of mischief from an unguarded or too much movement had not made her timid. Being however encouraged, at the end of the 6th week, she, to the delight and astonishment of her parents and friends, renewed her customary exercises of bending, &c., &c. The restorative and consolidating process of course still continues, and it will be more speedily perfected by these exercises. There is not the least shortening of the limb. As to the general health of the young and very interesting Adèle, it is better than before the mishap.

(a) I propose speedily giving some striking proofs of this truth, which I gathered during my experience throughout the progress of those last terrific epidemics, influenza and cholera.

OBSERVATIONS.

1st. In preventing muscular contraction (the chief cause of shortening), the physiological position favours most completely the union of the broken bone; and, in preventing undue pressure, it also admits of daily movements of the articulation and parts nearest the fracture, which have always a very good effect upon the general health, and facilitate the cure more than could have been anticipated.

2nd. The gentle pressure ensured by the physiologieal position involved another advantage which I must greatly insist upon. It produeed, and at the same time gave the power of controlling, that *reparative congestion* or moderate swelling so necessary to the attainment of a speedy and perfect cure.

3rd. It would indeed be entirely contrary to Nature, and cripple her best efforts, were we to check this indispensable swelling, and which is rarely injurious except from a negligent supervision, for, without a proper inflammation, Nature herself, although the most expert of artists, can effect no junction, no cementation; her intractable materials must be tempered by heat.

4th. It is very important also not to insist upon a too rigid diet, and necessary in every case to have due regard to the peculiarities of constitution, age, or habits of the patients; most especially is this neeessary when recourse is had to derivative bleeding in severe accidents, either to faeilitate the setting of fractures, or to secure those physiological consequences which an active antiphlogistic treatment ean alone effect; for none can with impunity endure total abstinence.

5th. I need scarcely remark how indispensable it is to set as soon as possible a fracture of any kind. The patient's relief from immediate pain, and much of the length of cure, alike depend upon this.

6th. In eonclusion, I would beg to urge upon the junior members of the profession not to hesitate in action, or take alarm at the depression, or even insensibility, which sometimes follows fractures in persons of a peculiar nervous susceptibility, but to take advantage of this "natural chloroform," if I may so call it, and act at once. They will find the re-action is mueh milder, and a great advantage gained in the tranquillity of the patient and of anxious friends; for here, as in many other eases, the mind asserts its power over matter, and we find our moral weapons are not to be despised.

7th. In every case, let all be left as much as possible to Nature, the artist who requires only time, fire, and fuel to effect the most eomplex repairs; and, after having set the limb, regulated the diet, encouraged the patient, and induced that gentle essential *inflammatory congestion*, we may, as faithful ministers, exclaim with Ambroise Paré, the illustrious restorer of operative surgery in Francc:

"Je les pansai et puis Dieu les guarit."

3, Lowcr Brook-street, Hanover-square.

ON TOO CONFIDENT PROGNOSIS IN PULMONARY CONSUMPTION.

By C. J. B. ALDIS, M.D.,
Fellow of the Royal College of Physicians and Lecturer on Medicine at the Hunterian School.

Many medical men no doubt remember some consumptive patients who have long survived the period of life allotted to them by their professional attendants. The time fixed upon may have been one or more years, nevertheless the patients have clung to life with wonderful tenacity, regardless of the opinion so confidently expressed. It struck me that a few remarks on this subject, which I have been in the habit of noticing in my lectures for several years, might not be without use, as a popular writer, to whom I shall presently allude, has thought it sufficiently interesting to be mentioned in his autobiography.

The late Mr. B—— B——,(a) a medical man, who practised for many years in Blackfriars-road, informed me, at his residence in Brunswick-square, where he had retired, that, when a student at St. George's Hospital, he was attacked with expectoration of blood, for which he consulted the late eminent Dr. Baillie, who told him he must discontinue his professional studies and go into the country; in fact, he intimated that "I must go into the country and die." "I went into the country, but improved so much in health that I resumed my studies and subsequently became engaged in extensive practice, and here I am now dying from disease in the hip-joint; if anything kills me it will be that, for I suffer excruciating pain and can take no exercise." I knew Mr. B. for several years: he was married, had several children, carried on a very extensive practice, and realised a fortune by his profession. When I last saw him he was more than seventy years of age, and Dr. Baillie must have been dead a great many years prior to his pupil patient.

I hope no person will imagine that this case has been brought forward with a view to disparage the opinion of Dr. Baillie, who died long before my time, and whose works are the boast of our profession; nor, in relating the following case, have I the slightest intention to detract from the well-earned reputation of another physician. I attended a law-writer on two occasions, who resided in Charles-street, Westminster. He told me that he had been under the care of the late Dr. Anthony Todd Thompson, for consumption, who had given him one year to live; but soon after the Doctor himself died, and the patient is now alive, greatly improved in health, and able to take much walking exercise in a very upright posture.

Mr. Leigh Hunt, in his interesting Autobiography, Vol. III. p. 12, relates the following anecdote:—"We had not been in the house above an hour or two, when my friend brought the celebrated surgeon, Vaccà, to see Mrs. Hunt. He had a pleasing, intelligent face, and was the most gentlemanlike Italian I ever saw. Vaccà pronounced his patient to be in a decline, and little hope was given us by others that she would survive beyond the year. She is alive to this day, and Vaccà has been dead many years." Mr. Hunt observes, "that it appears to him, from more than one remarkable instance, that there is a superstition about what are called declines and consumptions, from which the most eminent of the profession are not free." It appears to me to be rather presumptuous, as well as unkind, to strictly define the period of a consumptive patient's existence, especially when we see some striking instances of amendment for a long period, even when they had previously appeared to be in the jaws of death.

1, Chester-terrace, Chester-square.

(a) I enclose the name confidentially.

Dr. Henry Davies.—A few of this gentleman's attached friends met on Monday last, at the Hanover-square Rooms; Sir C. M. Clarke kindly came to town to take the chair; there were also present, Sir Charles F. Forbes, Drs. Locock, Bright, Lee, Cape, J. Clarke, MacIntyre, Merriman, &c., Messrs. Guthrie, Pilcher, Blagden, Bowling, Squibb, and several others, when the following gratifying address was unanimously adopted and signed by those present: "To Dr. Henry Davies.—We (several members of the medical profession) cannot allow you to leave London without tendering to you an expression of our esteem and regard, and, at the same time, our sorrow that loss of health, which we sincerely trust will be only temporary, compels you to seek a restoration of it in the more pure air of the sea coast, and in the removal from exertion in the active duties of your profession in London. We sincerely hope that you will be enabled to return to us with renewed vigour, that your friends may again have the pleasure of your society, and your many attached patients the advantage of your professional advice."

Mr. J. F. Clarke.—A meeting of medical men took place on Thursday, the 7th inst., at the house of Dr. John Webster, in Brook-street, for the purpose of promoting a subscription to present a testimonial to Mr. J. F. Clarke. We rejoice to see the services of a reporter to the medical press thankfully acknowledged, and rewarded more substantially than by the mere salary attached to the office. For these services Mr. Clarke deserves well of the profession. We can testify to the accuracy and impartiality of Mr. Clarke's reports, and at the same time to the tact with which, while he communicates to the reader those parts of a speech which really deserve to be recorded, he omits all the nonsense with which the speakers sometimes indulge their audience. Services such as these certainly deserve reward—especially from speakers who have been so obliged. The following gentlemen were appointed to carry out the objects of the meeting: Dr. Golding Bird, Dr. Chowne, Dr. Daniell, Mr. Erichsen, Mr. Fergusson, Mr. Hancock, Mr. Harvey, Mr. Bird, Dr. Moore, Dr. Webster, Dr. Winslow, Mr. Wade, Mr. Streeter, Dr. Sibson. Dr. Wing and Mr. Borlase Childs to act as Secretaries. Nearly one hundred pounds were collected in the room.

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LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, November 16.—Medical Society of London. *Subject*:—Mr. Hunt on the Mercurial Treatment of Syphilitic Eruptions. Eight o'Clock.

——— ——— Guy's Hospital Physical Society. Eight o'Clock.

Monday, November 18.—Statistical Society of London. *Subjects*: Dr. Schleisner on Statistics of Sceland; and Dr. C. Finch on the Intensity of Cholera. Eight o'Clock.

Tuesday, November 19.—Pathological Society of London. Seven o'Clock.

——— ——— Linnæan Society of London. Eight o'Clock.

Thursday, November 21.—Harveian Society. Eight o'Clock.

Saturday, November 23.—Medical Society of London. *Subject*:—Mr. Coulson on the Nature and Treatment of Enlarged Subcutaneous Bursæ. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 16.

DISTRESSED MEDICAL MEN.

Our appeal in the cause of charity has been nobly answered. We have already received 13*l.* 15s. from various medical men, whose names we refrain from publishing, as they are of that order of persons who "do good by stealth, and blush to find it fame." The prompt benevolence and sympathy exhibited by these gentlemen furnishes an example that will, we trust, be imitated by a large number of our professional brethren, who, although they may not hear the expressions of gratitude with which their donations will be received, will remember that true charity has a twofold effect, and ennobles the heart of the benefactor as much as it hallows the affections and chastens the spirit of the virtuous recipient of his bounty. "*Bis dat qui citò dat,*" is a motto that should never be forgotten; for the value of a benefaction to a famishing man does not consist so much in its amount, as in its timeliness and applicability to his urgent necessities.

TESTIMONIALISM.

Public clamour has been long and loud on the monopolies of the corporate medical institutions. They are opposed to the liberalizing influence of the age, incompatible with a well-organized system of medical qualification, with the welfare of society, and the requirements of professional respectability. But, while we clearly discern that an intimate connexion between medical men and the great corporate colleges is necessary to the efficiency and dignity of the profession, we cannot withhold the expression of our honest conviction, that one cause of the medical character being often ranked so low in public estimation may be found in the want, among our members, of proper self-respect—in the indiscreet proceedings of those who, at the expense of truth, exaggerate the importance of small acts of merit in their friends, and exalt men from whom they may have received kindness to the rank of public benefactors. The public, however, have become too lynx-eyed to be deceived by mere pretensions to merit. However amiable the motives of injudicious distributors of favour, who, in the warmth of their zeal for friends, exalt their ordinary actions to the standard of public merit, and demand for them public sympathy and gratitude, we feel called upon to impugn their judgment, and to denounce the practice, now so frequent, of bestowing, with all the parade of widely-recognized reputation, testimonials on those whose only merits are their private virtues. Were such testimonials simply confined to the circles whence they emanate, or the true motives for giving them assigned, we should not be disposed to consider them objectionable, or calculated to weaken the professional character. But, when importance and support are sought beyond so humble a limit, we must enter our protest against a practice fraught with the evil of giving a false colouring to professional merit in the public eye. We must not forget that "praise undeserved is censure in disguise."

OVARIOTOMY.

We propose, in our next Number, to call attention to the proceedings of the Medical and Chirurgical Society on Tuesday last, when an instructive discussion occurred upon the operation for extirpating a diseased ovary. We call the discussion instructive, because, thanks to Dr. Lee, it elicited some practices which called forth strong expressions of disapprobation from the Fellows, and afforded some of the leading surgeons of the metropolis an opportunity of publicly recording their opinions upon the propriety and the safety of the operation.

The extirpation of the ovary,—a proceeding called by the German pig-slaughterers "Nun-making," *(Nonnenmachen,)* —has been safely effected upon several occasions; but it appears that exploratory cuts through the abdominal parietes, followed by the introduction of the finger among the convolutions of the intestines, for the purpose of ascertaining the condition of the pelvic viscera, are extremely common with at least one—but we trust with no more than one—practitioner. We do not intend to let this subject drop.

Wierus relates that a certain butcher cut out both the ovaries of his daughter; and a second practitioner in the same craft persuaded his wife to undergo the like operation. The gentleman to whose practices we refer has, therefore, some precedents to act upon.

Those extremely orthodox members of the profession, who fear that, since the introduction of chloroform, our fair fellow-creatures may escape some of the sufferings entailed upon them by the sin of our first parent, may, after these recent disclosures, rest happy and contented upon their pillows. Although labour-pains are alleviated, and the speculum and caustic cane likely to be laughed down, ovariotomy yet remains to inflict unnecessary torture and to sacrifice life.

The York County Hospital is ventilated by a machine of Dr. Arnold's, which throws in 2,000 cubic feet of fresh air per minute.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

On Diseases of the Breast and their Treatment. By John Birkett, F.R.C.S., F.L.S., Assistant-Surgeon to Guy's Hospital. Pp. 258. London. 1850.

The Jacksonian prize for 1848 was awarded to this treatise. It contains a tolerably copious bibliography—an account of the normal anatomy of the breast before and after puberty—reference to cases in which anomalies have been observed in the number and situation of the breast—and, finally, a pretty full history of the diseases of the organ. Those depending upon the development of cystic and intracystic growths, and those due to partial or general hypertrophy of the tissues entering into the composition of the breast, are treated of at some length—100 of the 250 pages of the treatise being devoted to their consideration. As it is to this part of his work that Mr. Birkett has devoted the greatest portion of his attention—in it that the chief part of the originality of the work is to be found,—we shall offer our readers an account of the author's views on these subjects.

"Two classes of cysts," Mr. Birkett says, "are found in the mammary gland, each characterised by marked anatomical peculiarities."

They may be arranged as follow :—

"1st. Cysts depending upon dilatation and a morbid condition of the lactiferous ducts or acini.

"2nd. Cysts produced by a peculiar action in the fibro-cellular envelope of the gland tissue, and the consequence of a morbid state of the function of nutrition."

But not only may the cysts vary in structure, but their contents may also vary in consistence, nature, and mode of origin. Cysts of the first class may be, from the smallness of their size, scarcely perceptible, or they may be as large as filberts. Their external investment is formed of fibro-cellular tissue ; their interior is lined by a layer of epithelium. The epithelium resembles in structure that lining the ducts. The contents of cysts having this origin consist of colestrine, granular corpuscles, milk globules, fat globules, *i.e.*, of the secretions of the gland. Their formation appears to be due to obstruction in the calibre of the minute ducts. Contraction follows, and ultimately the duct above the dilated portion is obliterated. If secretion go on into the cyst thus formed, it may attain a considerable size. If the more fluid portion of the contents be absorbed, then the mass may assume a tolerably firm consistence. As it is evident that whatever leads to obstruction of one duct may lead to obstruction of other ducts, and whatever leads to obstruction of a duct at one point a similar cause may give rise to obstruction of the same duct at other points, so it is evident that the breast may be ultimately thickly studded throughout with cysts. Not long since, a breast thus affected came under our observation. A large quantity of fibrous tissue had been developed external to the ducts; considerable induration of the gland existed; and, till the breast lay on the table, doubts were entertained by some of the first surgeons in the metropolis, as to whether the mamma was the seat of cancer, of chronic abscess, or of the disease under consideration.

With reference to the cysts of the second class, they have their origin in the collection of fluid "in the areolar tissue of the mammary gland." A cyst being thus formed, it is subsequently lined "with tesselated or hexagonal epithelium."

Mr. Birkett regards the fluid contents of these cysts as different from ordinary serum, and considers it as "a superabundant effusion of blastema," and the whole new growth as an imperfectly developed gland tissue. It is to growths of this kind that Müller applies the cysto-sarcoma.

The fluid contents of cysts in the mammary gland may be, first, turbid, greenish in tint, and slightly fetid in odour. This kind of fluid is formed, Mr. Birkett affirms, only in cysts depending for their origin on obliteration of the ducts. Secondly, "glairy, tenacious, clear serum, sometimes of a reddish tint." This variety of fluid is found in the true sero-cysts of cysto-sarcoma.

But, instead of fluid or semi-solid contents, the latter having their origin in the absorption of the watery elements of the former,—solid masses of varying size may be found projecting into the primary cyst. These intra-cystic growths Mr. Birkett regards as formed of imperfectly developed gland tissue. Müller's cysto-sarcoma phyllodes owes its peculiar characters to the presence of these solid intra-cystic growths.

"Cysts of every variety of size," says Mr. Birkett, "cysts containing fluid only, cysts with fluid and intra-cystic growths, vascular and pendulous, very soft and gelatinous, in other instances of the most fibrous and solid nature, present themselves in different parts of one and the same tumour."

When we take into account the changes tumours formed of cysts and intra-cystic solid growths,—cysts formed by local dilatation of lactiferous ducts, by the collection of serosity in the meshes of the fibro-cellular tissue of the gland, and intra-cystic growths formed by the effusion of blastemata, insusceptible of development into perfect gland tissue—may undergo local death, local inflammation, distension from extravasation of blood,—and then reflect on the changes, the products of inflammation, and the alteration the effused blood may experience, we can conceive the difficulty of resolving the enormous tumours which result into their component histological elements.

Hypertrophy.—Much confusion has been engendered by pathologists having often spoken of organs as hypertrophied, when in reality they were merely the seat of a growth of tissue not entering into the normal constitution of the organ.

True hypertrophy Mr. Birkett defines to be "that state of an organ in which one or more of the tissues of which it is normally composed are developed in an extraordinary degree." Now, we must seriously protest against this definition of hypertrophy of an *organ*. The organ itself is not, in the case supposed, hypertrophied,—it may even be atrophied; every component of a gland, say, save the fibrous, may have disappeared,—not a particle of tissue capable of secreting may remain ; but, if the fibrous tissue should have experienced an abnormal development, Mr. Birkett would be obliged, if he adhered to his definition of "hypertrophy of an organ," to declare the gland in question, the secreting element of which we have supposed absolutely wanting, to be hypertrophied. The fibrous tissue would, in the case here imagined, be hypertrophied ; the secreting element of the organ atrophied. The organ, as a whole, could not then be said, whether diminished or increased in size, to be either atrophied or hypertrophied. Hypertrophy or atrophy of a tissue, entering into the normal composition of an organ, and hypertrophy of the organ itself, are two very different things, and ought always to be kept distinct by pathologists laying claim to accuracy in their nomenclature.

Mr. Birkett maintains, *but advances no dissections* to prove, that there is a new growth of gland tissue at each pregnancy, the organ returning to its virgin state after the mother has ceased suckling. Instead of labouring, however, to prove this, Mr. Birkett attempts to throw the *onus probandi* on those who may be disposed to doubt his assumption, and asks if this hypertrophy of the organ at each pregnancy is not admitted, how is the great increase in the size of the breasts, which occurs between the fourth and ninth months, to be accounted for? Surely we need not resort to the notion, that new tissue is formed during each pregnancy and absorbed subsequently, to be again and again reformed and re-absorbed, to answer this question. Speculations on matters of fact are, it appears to us, very useless, or we think we could offer a far more simple explanation than Mr. Birkett. But anatomical research, and not closet dreams, must solve the problem. Let Mr. Birkett ask nature a few questions on the subject. Sir A. Cooper judged from naked-eye characters, that what he termed chronic mammary tumour was local hypertrophy of the mammary gland, one lobule being considerably enlarged : the microscope confirms Sir Astley's opinion.

Mr. Birkett describes this class of tumours under the term "Adenocele, or lobular imperfect Hypertrophy." He enumerates three varieties :

1st.—"A growth identical in structure with a male rudimentary gland developed upon and in contact with a lobe of a normal female breast.

2nd.—"Innumerable terminal cells, united together by well organized areolar tissue, but presenting no duct.

3rd.—"A more or less retrograde condition" of the two last. Ultimately "they mingle with, and can no longer be distinguished from, the cysto-sarcomata."

If nervous filaments are implicated in an "Adenocele," then "the painful tumour of the breast" is formed. The "corps fibreux" of M. Cruveilhier are identical in structure with the tumors above referred to. Although leaning to the opinion, that so-called fibrous tumours of the breast are in

reality only more or less perfectly developed gland tissue," Mr. Birkett says: "I am not prepared to deny the existence of a hypertrophied condition of the fibre tissue."

Cancer of the Breast. The genus carcinoma is divided by Mr. Birkett into carcinoma fibrosum; carcinoma medullare; carcinoma medullare hæmatodes; carcinoma medullare melanodes; and carcinoma colloideum. We agree with Dr. Walshe in repudiating the title of those specimens of cancer in which black pigment exists to be elevated into a distinct species. The presence of black pigment is an accident in no way influencing the progress of the particular case. Moreover, the nature of the pigment may vary infinitely; sometimes the black hue is dependent on an alteration in the colouring matter of the blood; sometimes to sulphuret of iron; sometimes to an animal pigment totally distinct from either. Because a specimen of carcinoma, be it encephaloid or scirrhous, has its substance infiltrated with one or more of these forms of pigment, to give it a new name and elevate it into a distinct species, is, it appears to us, illogical and unscientific.

In this chapter is an analysis of thirty-seven *post-mortem* examinations of the bodies of persons who died in Guy's Hospital with carcinoma mammæ. It would have added considerably to the value of the analysis if the author had informed his readers whether or not *all* the organs were examined in every one of the thirty-seven bodies. If, as we suspect, all the organs were not examined, then the table is of little value. If all the organs were examined, it certainly would have added very much to its value if Mr. Birkett had entered a little more fully into particulars—had, in fact, analysed his facts a little more closely. He might, it seems to us, consult for a model Rilliet and Barthez' analyses of their cases of tuberculosis in children. It is evident, from the table given by Mr. Birkett, that in many instances very many organs must have been the seat of cancerous disease at the same time as the breast; but to learn what were the combinations, and which the organs primarily, and which those secondarily affected, we look in vain.

To-day we examined the body of a bitch, whose breast was the seat of primary carcinoma. The lungs, heart, and kidneys had become extensively secondarily affected.

Each chapter of the work before us is followed by a series of cases carefully selected from different authors; these cases are illustrative of the subject treated of in the chapter to which they are appended.

We have made no reference to the treatment recommended by Mr. Birkett, and for this reason: that his remarks with reference to treatment are not only wanting in originality, but, given as they are in the most general terms, carry with them but little weight. When a Stanley, a Brodie, or a Lawrence speaks in general terms of the best method of treating a surgical case, we listen with attention, confident their dicta are founded on experience; but it behoves a young man, when touching on therapeutics, to give us some general notion of the numbers of his cases, &c. Again we recommend Rilliet and Barthez to the consideration of young men about to publish the results of their experience. Appended to each chapter of that model work is a note of the following character: Our remarks on this subject are founded on so many (be it six or 600) cases. With such a memorandum, we can attach a due importance to what follows.

This lack of specific reference to authorities, and a clear statement of the data on which their remarks are founded, takes much from the value of most books published during the earlier part of a man's career. In conclusion, we must express our conviction, that as a whole, Mr. Birkett has produced a work which will prove useful to a large class of the junior members of our profession, and interesting, from its pathological information, to a considerable number of men not fully acquainted with the present advanced stage of that department of physic.

Facts and Observations in Medicine and Surgery, with Additional Memoirs. By JOHN GRANTHAM, F.R.C.S.E., and Fellow of the Medico-Chirurgical Society. London. 1849.

Mr. Grantham has for many years advocated the propriety of suspending fractures of the extremities. The proposer of this method of treatment was Sauter, of Constance. M. Mayor, of Lausanne, used it extensively. The latter published a paper in the *Journal des Connaissances Medico-Chirurgicales*, in which he strongly urged the use of suspension; affirming, that if compound comminuted fracture, as from gun-shot wounds, were so treated, Larrey's law, that in all such cases amputation is to be performed, would no longer be applicable.

To display the advantage of suspension, M. Mayor says:—

"Break or saw the femur of a corpse; lay open the two extremities of the fractured bone, and place the limb, with proper care, on the suspended board; fix it and suspend, and remark what motions take place in the bone when the apparatus or the body is moved or turned in any direction."

Dr. Wigan bears testimony to the excellence of the plan:—"I have," he writes, "*often seen patients get in and out of bed without any assistance, and without risk of disturbing the limb.*" Some cases are detailed by the author to exhibit the advantages obtained by the treatment of fractures on Sauter's plan, *i. e.*, by suspension. Mr. Grantham has recommended, and figured also, several other very useful apparatus, for the treatment of fractures of both upper and lower extremities.

The remainder of the surgical section of the work is occupied with the particulars of some interesting cases that have occurred in the practice of the author, and with practical remarks on the same. One of the most remarkable of these cases is that of a lad aged 16½ years, whose skin was destroyed over the extent of six hundred superficial inches, in consequence of a burn inflicted by the explosion of fireworks:—

"The subcutaneous structure was completely lost, so that the arteries and veins were seen, as if neatly dissected, lying on the surface of the muscles and fascia."

It required six years and a-half for nature to effect the complete reparation of this extensive injury.

A curious fact was observed by Mr. Grantham:—

"During the whole process there has (and the disposition still continues) been more or less tendency to congestion of the brain, attributable to the imperfect action of the cutaneous structures in regulating the action of the animal heat, as the skin, by its absorbing power, is enabled to act as an organ of respiration."

Perspiration was found to invariably afford relief to the giddiness.

The second part of the work is devoted to the consideration of some points and facts in medicine. One of the best chapters is that on the Effects of Deficient Ossification of the Cranium. Defect of the bony structure of the cranium, Mr. Grantham thinks, is of itself a cause of epilepsy, cerebral congestion, and hydrocephalus, especially between the ages of nine and twenty months. To illustrate and support his position, Mr. Grantham introduces the histories of three cases of "epileptic fits," in two of which recovery, and in one temporary improvement, followed the application of a roller to the head.

We ought to observe, that the greater part of the essays of which the book before us is composed had been previously published in weekly periodicals; and, as the different essays treat on subjects bearing no relation to each other, the work, as a whole, has a very fragmentary character. Like many practical men, Mr. Grantham every now and then gives rein to his fancy, and, on such occasions, funny flights his fancy takes, as in the chapter on Typhus Fever. We cannot conclude without expressing our strong disapprobation of a writer of original essays making an extract of *seventeen pages* from a work on Skin Diseases, to which any one who desires can get access; and another of six pages from an anatomist's Vade Mecum in common use.

Corpulence; or, Excess of Fat in the Human Body, in its Relation to Chemistry and Physiology, its Bearing on other Diseases, &c. &c. By THOMAS KING CHAMBERS, M.D., &c. &c. Pp. 166. London. 1850.

Dr. Thomas K. Chambers having been appointed Gulstonian Lecturer for the year 1850, chose for the subject-matter of his discourses the various relations of excess of fat in the human body in health and disease. Those lectures, emended and somewhat enlarged, are contained in the volume before us.

The evils incidental to obesity or emaciation have, heretofore, received but little consideration from the profession. The subject has, Dr. Chambers observes, had an air of ridicule cast around it, or been treated of in the most puerile manner.

"I confess," he continues, "I cannot understand how any

human infirmity, which involves pain and discomfort can ever be a fit object of ridicule, or how that which shortens the term of life can be considered of trivial importance."

Henceforth we are confident the subject can be treated only in a serious spirit, and to Dr. Chambers is due the merit of having rescued it from undeserved contempt.

Dr. Chambers keeps obesity or polysarca distinct from fatty degeneration; the latter being a substitution of fat for the protein molecules of a part; the former merely an increase of growth, without change in chemical or anatomical characters.

After treating of the uses, the sources, and the assimilation of fat, Dr. Chambers considers the relation of man to oleaginous food, and shows that the desire for this form of aliment is increased at the age of puberty, especially in the female sex, which agrees with Andral and Gavarret's observation, that

"The excretion of carbonic acid by the lungs increases in quantity during childhood very exactly in proportion to growth, the augmentation steadily progressing up to the period of puberty." . . . "The occurrence of menstruation, however, puts a complete stop to the increase in the amount of carbon thus passing away, and sometimes even causes it to make a retrograde movement."

Dr. Chambers argues that weight is the best measure of fat:—

"I am disposed, then, to think we cannot have a better test of the increase of fat than in the indications afforded by the balance. For all practical purposes we may consider that the bone and muscle are of a certain weight in proportion to the size of the creature, and that the excess is adipose matter."

The relation between the weight and height of an individual, as a measure of the fat, Dr. Chambers proposes to apply as a test of health for the purposes of insurance companies.

In health there is loss of fat in summer, and a gain in winter; the reverse of which superficial theory would have taught us to expect, nor can physiology account for it. Dr. Chambers believes that in addition to this annual loss and gain of weight, there is a change in weight which observes a shorter periodicity. The volume of air obese persons are capable of inspiring is considerably less than the average quantity of those of their height. The lungs instead of holding more air, because the body is larger, appears in these cases of diminished capacity. Dr. Hutchinson attributes this diminished vital capacity to the motion of the ribs being impeded by the fat outside them. Dr. Chambers, from some experiments made with Dr. Sibson's chest measurer, considers that the want of extent of movement is more apparent than real.

With reference to the treatment of obesity, in addition to those rules for the guidance of the sufferer which are ordinarily laid down, Dr. Chambers recommends strongly the use of liquor potassæ, in doses of from half a drachm to a drachm and a half, three times a day, in milk and water; and of the advantage to be derived from the use of this medicine he adduces one or two striking examples. Vinegar, he says, produces thinness only by injuring the digestive organs. Emaciation, its anatomical characters, its causes, and treatment are treated of in an appendix.

We cannot conclude our notice without remarking that Dr. Chambers' style is as excellent as his matter; it is elegant, lucid, and concise.

Account of a Calcified Testicle of a Ram. By Mr. Joseph S. Gamgee. 1850.

History and Description of an Ossifying Enchondroma connected with the Testicle of a Horse. By Joseph S. Gamgee, Student in Medicine in University College. London: 1850.

The first of these pamphlets is a description of a curious specimen of calcified ram's testicle. The tubes of the organ appear to have been infiltrated with various salts of lime, especially the phosphate. The tubules were filled by uniform earthy deposit of a dead white colour. Mr. Gamgee refers to a drawing of Sir Robert Carswell's in the magnificent collection of that celebrated pathological anatomist in University College Museum, in which an early stage of the same change, also in a ram's testicle, is represented.

The second paper is particularly interesting, as illustrating one mode, if not *the* mode, in which enchondromata ossify. The microscopical drawings on this point are very good. The cartilage constituting the bulk of the tumour was identical in organization with adult, and not, as is usual in growths of the description referred to, with embryonic cartilage. In the completely ossified portion, Haversian canals, lacunæ, and canaliculi were detected.

Both cases are illustrated by drawings, general and microscopical.

The manner in which these cases are detailed and reasoned on reflects great credit on their youthful author.

Emploi Medical de l'Arsenic dans les Maladies de la Peau, &c.

On the Use of Arsenic in the Treatment of Skin Diseases and Ague. By M. Gibert, Physician to the Hospital of St. Louis. Paris: 1850.

This short pamphlet contains an account of M. Gibert's experiments with arsenic at St. Louis. The preparation employed was M. Boudin's arsenical solution, composed of one grain of arsenious acid dissolved in a pint of water. This latter quantity was divided into five parts, and each part, containing one-fifth of a grain of arsenic, was administered daily.

Scaly affections of the skin, as psoriasis and lepra vulgaris, were those principally submitted to the arsenical medication; but, on comparing the results with those obtained from other modes of treatment, we do not find any proof of the superior efficacy of the mineral poison.

Thus, M. Gibert alludes to 98 cases of psoriasis treated with arsenic: of these, 40 were cured; 20 obtained no benefit; 38 were discharged, either improved or partially cured. It should be observed, besides, that in all these cases local remedies, such as sulphur baths, sulphur fumigations, ointments, &c., &c., were employed in conjunction with the arsenic. 119 patients were treated without arsenic, by the various remedies usually employed for psoriasis, such as mineral waters, purgatives, &c., aided by topical applications. Of these 119 cases, 59 were cured, a proportion greater than that obtained from arsenic. Of the various local applications, pitch-ointment was found by far the most efficacious, and next to it vapour-baths, or sulphur-baths and sulphur fumigations. Twelve patients were treated with the corrosive sublimate baths, so highly recommended by one of the professors of the faculty of medicine; but, though continued from twenty to forty days, their effects were insignificant. Of the 119 cases already alluded to, 23 obtained no benefit, a proportion, likewise, more favourable than that obtained under the arsenical method.

Della Tuberculosi in genere, e della Tisi Pulmonare in specie. Del Protomedico Luigi Parola.

On Tuberculosis in general, and Pulmonary Consumption in particular. By Louis Parola, M.D. Turin. 1849.

This work obtained the prize instituted by the Royal Academy of Turin, and is considered to contain the best historical account of tubercular diseases that has ever been written. The erudition and research displayed by the author are indeed prodigious. Everything which has been composed relative to tubercular diseases, from the time of Hippocrates to the present day has been carefully examined, and every important fact or valuable opinion connected with the subject will here be found on record.

After having passed in review the various doctrines professed relative to the cause and nature of tuberculosis, Dr. Parola offers a theory which he thinks better calculated than any other to explain the phenomena of tuberculosis, and most accordant with facts.

With all our best writers, Dr. Parola considers tuberculosis a disease of the blood; but he regards the disease as congenital, or at least arising from an original want of harmony between the organic functions of the liver and lungs.

During gestation the blood of the fœtus is renewed by the liver; after birth the blood of the infant is renewed by the lungs. In a perfectly normal state, the lungs take on them this hepatic function immediately after birth; but, if the respiratory organs be imperfectly developed, then hæmatosis goes on imperfectly; the liver is unable to supply the place of the lungs, as it does in the fœtus, the carbonic acid is not

completely eliminated, the blood becomes vitiated, and the tubercular cachexia established.

The arguments which our author adduces in support of this theory are highly ingenious, but, we must confess, not conclusive. The main therapeutic indication to which the theory leads is the employment of means calculated to improve and favour the development of the respiratory organs—an indication too much neglected by medical men at the present day.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

DEATH OF PROFESSOR FOUQUIER.

M. Fouquier, head physician of the Hospital of la Charité and professor at the Faculty of Medicine, died here last week, in the 74th year of his age. For more than a quarter of a century M. Fouquier occupied the same rank among the practitioners of Paris that Dr. Chambers did at London. He had been successively physician in ordinary to Charles the Tenth and to Louis Philippe; and no medical case of any importance occurred among the upper orders of society for which the aid and advice of M. Fouquier were not required. Yet he was little known to fame, either abroad or at home. The few works published by M. Fouquier were not calculated to attract much attention; but he possessed, in an eminent degree, all those practical qualities which constitute the perfect physician—the bed-side practitioner, and which the sure instinct of the public never fails to discover and to reward with its confidence.

These qualities, indeed, must have been of rare excellence in M. Fouquier, for his rise was at once rapid and unexpected. Soon after his *debut*, he was elected professor of medicine at the Faculty of Medicine, and this at a time when many a more brilliant competitor endeavoured to fix public attention, by seducing theories or discoveries of importance. The election, at that period, was vested in the hands of the profession, who without hesitation selected Fouquier, although he had never presented himself at any concours, and the few memoirs which he had published were of trifling value. From the moment of his election the rise of M. Fouquier was most rapid, and no French physician ever obtained anything approaching to the practice which soon flowed in on him. Success, of course, engendered envy, and many were inclined to attribute the unexampled vogue which M. Fouquier enjoyed for so many years to court intrigue. Old Broussais used to call him the "refugium peccatorum;" but those who were acquainted with the character of the deceased professor, who had watched his career, and seen him at work at the bed-side of the sick, or in cases requiring prompt and sure judgment, must confess that his reputation was founded on qualities rare amongst French physicians, which recal to mind the best days of medicine, as interpreted and practised by the immortal Sydenham.

SPONTANEOUS GENERATION.

M. Gros, of Heidelberg, communicated last week to the Institut the substance of some curious researches relative to an animalcule which, according to the learned author, is developed spontaneously in the frog's bladder. The animalcule now alluded to has been denominated by M. Gros "*torquatina*." It is produced by the mucous membrane of the bladder, which detaches a granule; this granule becomes the crown of the animalcule, while the neighbouring vesicles become the body. To follow the development of the animalcule, it is necessary to take a small bit of the mucous membrane without injuring it, and then place it very cautiously under the microscope. Any pressure or solvent, even serum, will kill the animalcules. If these precautions be observed, the development of the animalcule may be followed. A mere unorganised granule is detached from the mucous membrane; this coalesces with other granules to form a certain portion of the animalcule; the latter then folds up its crown, fixes a number of vibratile cilia in various parts of its body, becomes oval, and constitutes an *opalina*. This latter forms a nidus in the mucosities of the intestine, deposits an egg, and the latter gives rise to a true worm of the ascaris kind.

If the above observations be correct, we must admit for certain entozoa a primitive species of generation different from any hitherto known.

CAUSES AND CURE OF GOITRE.

The number of persons affected with goitre in France amounts to about 450,000; the number of cretins is little less than 35,000 to 40,000. As there can be no reasonable doubt that both affections depend on circumstances capable of being modified by hygiene, the French Government, following the laudable example of the Sardinian authorities, have appointed a commission to inquire into the causes which may give rise to goitre, and into the best means of preventing or curing this unsightly disease. The following *resumé* of the opinions entertained by the Commission may be useful to place on record, although it would seem that they have been rather exclusive in attributing the development of the malady to a single cause.

The first care of the Commission was to construct a geographical map of goitre; to study the nature of the soils in which the disease is endemic; and to analyse the food, drink, &c., of such localities as compared with the aliments in neighbouring districts free from the complaint.

It was soon ascertained that the existence of goitre bore no relation whatever to latitude, climate, elevation of residence, poverty, or other depressing causes; but the chemical examination of the fluids employed as drink lead to a remarkable conclusion. It is this: "that goitre depends on the presence of magnesia in the food or drink, joined with the absence of a sufficient quantity of iodine to serve as an antidote." These two conditions are essential for the development of the disease.

A mere inspection of the maps of localities affected with goitre, and of geological maps, suffices to prove that the disease prevails endemically in magnesian formations. This fact is admitted by the most distinguished geologists—M. Elie de Beaumont, in France; M. Studer, in Switzerland; M. de Sismonda, in Piedmont. In every locality in which goitre prevailed as an endemic disease, the commission found a notable quantity of magnesia in the substances used for food or drink. In certain localities infested by the disease, although the formation is not magnesian, a large proportion of magnesia was found in the water drawn from the wells, as at Neris and Landisay.

This general fact is further corroborated by others of a particular kind. In the goitre countries it is a common habit for young men, who desire to escape serving in the army, to drink several pints of a certain kind of water daily; they soon become attacked by the disease and escape the conscription. Now, these waters are strongly charged with magnesia. On the other hand, families, which take care to drink no other fluid than rain water, invariably escape; and it is well known, that the water derived from the icebergs never gives goitre.

This latter fact has been applied in practice with the best effects. Many localities have been completely relieved from the disease by substituting the use of rain-water for well-water. In the town of Montmeillan, for example, goitre has almost completely disappeared since the inhabitants have been induced to drink nothing but rain-water.

A second important point established by the French Commission is, that a small portion of iodine, if taken daily with the food, acts as a preservative against goitre. Common sea-salt always contains a certain proportion of iodine, but not enough. From 10 to 50 parts per 1000 are required, and the Commission are of opinion, that if this proportion of ioduret of potassium were mixed with the salt used for food in goitre localities, the development of the disease would be completely prevented. Of course, if the people could be prevailed on to drink nothing but rain-water, the chief cause of the disease being removed, success would be much more certain. It is calculated that the general use of this ioduretted salt, in the goitre countries, would not entail an annual expense of 320*l*.

Dr. Grange, indeed, has employed this simple method with the best effects during the last eighteen months. Goitre has been banished from every family which consented to employ the ioduretted salt in a persevering manner. At the expiration of a few months, not a single individual remained affected, although every member of the family, from five years of age, had been previously afflicted with the disease. This is a most encouraging result, and a great triumph for medicine.

EXTIRPATION OF A GOITRE.

M. Roux has recently performed with success this operation, which has been almost banished, by universal consent, from the practice of surgery. The case presented, however, many favourable conditions for the operation, and the patient insisted in the most determined manner on being relieved from his infirmity. The tumour was not connected with any of the large vessels; but it seemed to extend for a small way into the chest behind the sternum. It was removed without any difficulty or considerable hæmorrhage, and the wound was perfectly healed within a month. The recurrent nerve was divided during the operation, an accident followed immediately by severe dyspnœa and loss of voice. The

latter, it is said, was partially restored. The tumour weighed more than ten ounces, and was about the size of a man's fist. Even M. Roux himself confesses that extirpation of similar tumours, when they do not, as was the case in the present instance, interfere with any important functions, should be avoided.

PHYSIOLOGY OF THE EYE.

Attention has been lately directed to the luminous circle produced in the eye by means of pressure on the eyeball, and an attempt has been made to apply this phenomenon to the diagnosis of disease in that organ. When sharp and rather sudden pressure is made on the inner side of the eyeball, this luminous circle is always developed, provided the retina be intact. Hence M. Serres (of Alais) proposes employing the means now alluded to in all cases where it is important to determine the condition of the retina. If the experiment, repeated for several days, fail to excite the luminous appearance, we may be certain that the retina is paralysed, and that any operation performed on the cornea, iris, or crystalline lens will fail to produce any benefit.

IODURATED OIL.

Experiments are now being made in several of the Parisian hospitals with an artificial cod-liver oil, intended, *on dit*, to supersede the original "pure." It is merely fine olive oil, containing a certain proportion of iodine. Whether the experiment will succeed or not, time must tell; but, in the meanwhile, a warm dispute respecting the parentage of the discovery (?) is going on between M. Marchal de Calvi and M. Personne, head apothecary at Ricord's Hospital. The former affirms he introduced the remedy into practice more than six years ago at Val de Grace. The disputants, it would appear, attribute the virtues of cod-liver oil to its iodine, a very questionable theory. However this may be, it is certain that oil forms an excellent vehicle for the administration of iodine, which is so apt to irritate the stomach if not sufficiently diluted with some mucilaginous fluid.

The German journals inform us that Professor Stromeyer, of squint celebrity, has been wounded rather severely at the battle of Idstedt, and brought prisoner to Copenhagen. The King, however, immediately ordered him to be set at liberty. You may set down this among the "facts" of civilisation alluded to in your last able leader. Larrey was made prisoner also at the battle of Waterloo, but he did not owe his freedom to English civility.

LIVERPOOL.

SMEE-ISM.

Among other circumstances worthy of record in this town, I may notice that the public have been for nearly two months, delighted, if not humbugged, by the illustrations of an American, Mr. Stone, of a system he designates electro-biology. Seeing that from his circulars he was able to make persons wide awake do anything he chose or the audience desired, when the patients were in the electrical state, my curiosity was excited, and I paid Mr. Stone a visit at one of his extraordinary exhibitions. I was unbiassed in favour of any peculiar system, and, as I had never seen the mesmerists do any wonderful things, and thinking this system to be of a similar nature, I went to see and learn. I must state, *in limine*, that I was humbugged, and regretted losing a shilling. I offered myself as a patient for operation, and desired, if possible, to put myself under the operator's control. But it was no go. With twenty-four or twenty-five others I was seated in a chair, with my back to the audience, in an easy position; a galvanic coin was put into my hand, at which I was to gaze in wonder and admiration till I was asleep or tired. The coin was then removed, and I was to close my eyes. In a while came the operator, who pressed firmly on my forehead with his thumb, his fingers being extended over my skull-cap, and defied me to raise my eyelids. However, he found I was not to be done, and said I might go, though I may state, that previous to saying this he tried the dodge of pressing on the brachial nerve, to cause pain and force me to keep my eyes shut. On some half dozen somewhat timid and sleepy simpletons he, however, succeeded in making them keep their eyes shut, and on these he subsequently proceeded to illustrate his powers. They fancied walking-sticks were umbrellas and snakes; that they had lost their eyes; that water was brandy, wine, gin, &c. &c.; they fancied, so they said, all sorts of things. This the audience believed, and this was electro-biology; but one of the patients, at the conclusion, stated that he had gone through his performance to discover whether it was not possible to do all that Mr. Stone had exhibited without being under the influence of electricity, and he was glad his success showed its fallacy. This caused a hubbub, and the meeting was closed without discussion. I have not the least doubt myself, though many believe to the contrary, that the whole affair is a got-up delusion.

PUBLIC HEALTH.

The diseases prevalent here are chronic bronchitis, diarrhœa, febricula, measles, scarlatina, and rheumatic fever. The mortality is greatest among children who die, from the system being unable to resist even moderately acute attacks of disease, because they are both ill-clothed, ill-fed, and otherwise neglected. Many, without doubt, die of starvation, and this is unknown to any except the practitioner, whose vocation necessitates him to enter the dwellings of the destitute population. Many a sorrowful case I have seen; families in a complete state of poverty and destitution from sickness, unable to get anything but *abuse*, and I repeat it, from relieving officers. Unfortunately I have not pluck enough to complain, partly because, perhaps, I am not in need myself. Still I regret the operation of many of our systems of charity.

GENERAL CORRESPONDENCE.

THE RELATIVE MORTALITY IN THE HOSPITALS OF LONDON.

[To the Editor of the Medical Times.]

Sir,—A paper "On the Health of London during the Six Months terminating Sept. 28, 1850," containing much valuable information, and one on which its author had evidently bestowed much time and labour, so as to arrive at correct data, was read by Dr. Webster before the Medical Society of London on the 2nd of November, and a copious abstract of it appeared in the *Medical Times* of last week.

It is owing, especially, to the well-known reputation of its author, to the general excellence of the paper and the notice which it may hence attract, and to the fact of some circumstances in connexion with it having been the subject of a leading article in the *Lancet*, that I feel it the more necessary notice should be taken of some inaccuracies which it contains, especially as they might materially affect the interests of the hospital to which I have the honour to be attached; and I feel sure that no one would be more willing to see them corrected than the author of the paper, whose object evidently was to arrive at and diffuse truth.

The chief subjects to which I would allude are the statements relative to the number of beds and the comparative mortality in the different hospitals.

Dr. Webster having drawn up a statistical table of the deaths in the general hospitals of London, (and which is quoted in the abstract of the proceedings of the Medical Society of London, in the *Lancet* of Saturday last,) proceeds to state, among other inferences, that "the lowest deaths, in reference to the number of beds, were reported from the Free Hospital," and "the largest comparative mortality, according to the same calculation, occurred at University College Hospital;" and, in a leading article on the subject of Dr. Webster's paper in the same *Lancet*, it is stated, with reference to the statistical table alluded to, "the discrepancy of results therein mentioned is curious, and requires some explanation, especially the great inequality of deaths which is reported to have occurred at two neighbouring institutions, viz., the Free Hospital and that of University College, the former showing the lowest, and the latter showing the highest comparative scale of mortality."

Now, Sir, it is precisely with the view of giving this explanation, that I address you.

And, firstly, as to the data on which the deductions are based. The number of deaths occurring in the different hospitals has been obtained from the weekly reports of the Registrar-General, and, so far as I have had time to look them over, they are stated with perfect accuracy, and I have not the slightest doubt that Dr. Webster has taken such means as appeared to him most likely to ensure correct results, in obtaining an account of the number of *beds* in the different hospitals. On looking over the table, however, I found, to my great surprise, that University College Hospital was represented as containing only 106 beds. Now, the number of beds in the institution is and has long been 122, all of which are in constant use; it will rarely happen, indeed, in any hospital, that every bed is occupied at the same time, a few, at least, being always kept ready for cases of extreme urgency; yet it does so happen that very recently *every* bed in University College Hospital was full, so that there were 122 patients in the house; on Saturday last, on inquiry, I found the number of in-patients to be 112, to-day it is 113; and, by referring to the Registrar General's weekly return of Births and Deaths for June 29th (No. 26), in

which there is an excellent statistical table, relative to the public institutions in London, it will be found that the number of patients in the hospital, on December 31st, 1849, and on March 31st, 1850, was respectively 111 and 113. The difference, therefore, between 106 beds, as stated, and 122, as they really are, will make a material difference in the ratio of the mortality to the beds as stated in the table, and as it actually is. I may also mention, that St. Thomas's Hospital, which in Dr. Webster's Paper is credited for 487 beds, contains, according to the Medical Directory of the present year, 520.

I must confess, with respect to the comparative mortality of the different hospitals, that when, on referring to Dr. Webster's table, I found the deaths in the Free Hospital to be stated as only 1 to 6¼ beds, while those at University College Hospital were as 1 to every 1¼ bed; I confess, I say, that I thought the subject one for very serious consideration. But, Sir, if it be desired to arrive at the relative mortality of the different hospitals, there is a point of much greater importance to be taken into consideration than the mere number of beds in the respective institutions. I do not now refer to arriving at accurate results as to the success of treatment at any particular hospital, for that would involve a careful estimate of the age, sex, previous health, &c., of the patients; of the nature of the diseases, their amount, intensity, duration, and complications, and of so many other details as, from any data already published, to be at present altogether out of the question; although, as Dr. Webster has remarked, if published, they would be of much interest and practical value. But in examining a much more simple question, that merely of the *relative mortality* of the various hospitals, the question naturally presents itself,—not, how many beds does each contain? but,—how many of the beds in the different institutions are *usually occupied by patients?*

On this subject the Registrar-General, in Nos. 26 and 27 of the "Weekly Reports," to which I have alluded, gives some important information, and my surprise at the small mortality reported from the Royal Free Hospital was diminished, when I found that the number of patients in that establishment (which, according to Dr. Webster's paper, contains 140 beds) were, at the two periods referred to by the Registrar-General, viz., December 31, 1849, and March 31, 1850, *forty-six* and *fifty-two* respectively.

According to the statistics given by the Registrar-General, based on the mortality of the first quarter of the present year, it appears that the average annual rate of mortality in all the hospitals, compared with the number of beds in them constantly occupied, amounts to 82 per cent.; that the mortality at University College Hospital is *less* than the average, being only 79 per cent.; while in St. Bartholomew's it amounted to 83 per cent.; and in St. George's, the Westminster, the London, and King's College Hospitals, respectively, it reaches 85, 92, 110, and 158 per cent.

It may, however, be urged, that Dr. Webster's statistics do not refer to the first quarter of the year, but to the six months terminating the 28th of September. Let us see, then, what is the result of a comparison of the number of deaths during this period in the different institutions, compared with the average number of patients. For the latter datum, I shall take the mean of the number of patients in the different general hospitals, as ascertained by the Registrar-General at the two dates above alluded to (December 1849, and March, 1850); and this will probably give a very fair average even for the past six months. The number of deaths I take from Dr. Webster's table; and I arrange the hospitals according to the average number of their in-patients.

	Average of Inmates.	Number of Deaths.	Ratio of Deaths to Inmates.
St. Bartholomew's	502	180	1 in 2¾
Guy's	490	164	1 ,, 3
St. Thomas's	428	115	1 ,, 3⅔
London	329	120	1 ,, 2⅔
St George's	296	106	1 ,, 2¾
Middlesex	294 (?)	86	1 ,, 3⅓ (?)
Westminster	153	78	1 ,, 2
University College	112	78	1 ,, 1¼
King's College	96	66	1 ,, 1½
Charing Cross	96	32	1 ,, 2⅔
Royal Free	49	22	1 ,, 2¼

I by no means attach much importance to this table, though it is certainly based on a *more* correct principle than that of comparing the number of deaths with the number of beds. From it, however, I find that the relative mortality in the various hospitals is very different from what appears when the deaths are compared with the number of beds; that, for instance, the deaths in the Free Hospital, instead of being 1 in 6¼, are actually as 1 in 2¼; and that, instead of ranking the first for its freedom from mortality, it finds its place next but one to University and King's College Hospitals, from which it appeared to be at so great a distance; while in the two latter institutions the ratio of mortality is exactly the same.

I trust that, in making the above observations, no one will for a moment think that I have any desire to range hospital against hospital, or to make the slightest invidious comparison between any of them. My object is far otherwise. It is simply to prevent misapprehension that I have entered upon this subject; for I well know how accidental occurrences, or the particular circumstances under which the different hospitals are placed, must influence, and from time to time alter, the relative mortality in each. The Registrar-General, in some observations which he published along with the table to which I have more than once referred, very properly says: "No inference should be drawn from the return in respect to the mortality of particular hospitals: thus, at King's College Hospital, the mortality may be high, from patients having been received in a dying state, or from an accidental concurrence of circumstances; or the mortality may be low, from the removal of patients in the last stage of illness." The fact that the ratio of deaths in all hospitals is constantly changing, is sufficiently shown by comparing the results of the first quarter of the present year, from which I have given abstracts, with those presented in the foregoing table.

I believe, indeed, that no one feels more than I do the importance of statistics and the value of the numerical method: but then, whether examined statistically or otherwise, facts must be compared under similar circumstances, and all elements of error must be taken into consideration, if we wish to deduce from them correct and satisfactory results; and it is precisely because the circumstances of the different hospitals are dissimilar, that I think we should be exceedingly careful in drawing any inferences from the result of such comparison. In the larger hospitals, where beds are numerous, cases of a much less severe character can be admitted than can possibly be the case in smaller hospitals; (*a*) where, again, the hospital is very dependent upon subscribers, it is difficult to refuse some cases, though of a very trifling character. In those hospitals, again, which have chronic wards, as the cancer wards of Middlesex Hospital, or the asylum of Guy's, patients may remain months, or even years, and thus increase considerably the number of beds occupied, and at the same time add very slightly to the mortality. The relative number of medical and of surgical cases must also modify the result, not to speak of the difference in the severity of the diseases admitted. Indeed, in the moderate-sized hospitals connected with large medical schools, such as University College and King's College Hospitals, where the cases are required especially for clinical purposes, the class of cases selected for admission are just such as are likely, in the end, to swell the amount of mortality, while it would, I sincerely trust and believe, be a very erroneous opinion to arrive at, that in these institutions any given case would not have as great a chance of recovery as at those hospitals in which, comparing the deaths either with the number of beds, or even with the number of beds occupied, nay, even with the number of patients admitted, the relative mortality might appear much lower.—I am, Sir, &c.,

CHARLES J. HARE, M,D.,
Assistant-Physician to University College Hospital.

9, Langham-place, Nov. 12, 1850.

CRANIOTOMY.

[To the Editor of the Medical Times.]

SIR,—Having read in one of the recent numbers of the *Medical Times*, some remarks on a paper that appeared in the *Provincial Medical and Surgical Journal*, on "Craniotomy," as practised in this city by my medical brethren, and having myself written a paper on the same subject, which was also published in one of the numbers of that Journal, I am induced to forward to you the result of an opposite mode of treatment of a patient who had had the operation of craniotomy performed on her four times, thinking that anything that might have been done, or any operation performed for the purpose of preventing, or to supersede the necessity of such a revolting and deadly circumstance, would be interesting, if not instructive, to your readers. The destruction of a human being, although in embryo, is an act that can never be justifiable until the cause demanding such a sacrifice has undergone the deepest reflection and consideration, and until full time has been allowed for the natural efforts of the mother to overcome the deformity

(*a*) If any comparison is to be made between such institutions as Bartholomew's or Guy's, and University College or King's College Hospitals, the *clinical* wards alone of the former should be taken as the basis of calculation.

of the pelvis which has obstructed the outlet of the child's head, and we are fully convinced that such an operation is absolutely necessary for the salvation of the life of the mother. Fortunately, these horrid cases are of very rare occurrence; and it is very possible that many of your readers may have had very extensive obstetric practice without ever meeting with a case that required the operation of craniotomy to be performed, and therefore would have had no experience in the mode or practice to be adopted to prevent it, while the cases are so few, and the materials for supplying information, and the opportunities of practice so uncommon, that every case that does occur must be considered of importance, and, when successfully treated, and the life of a human being preserved, must acquire more than a usual degree of interest, and will require from me no apology for bringing it before your readers. A case of simply rupturing the membrane containing the child in utero, for the purpose of inducing premature labour in a case of deformity of the pelvis, from the directions given and the rules laid down by authors for rupturing the membranes for the purpose of bringing on labour about the seventh or eighth month, may seem to be a very easy affair, and to be accomplished without much difficulty. But those who may have occasion to rupture the membrane containing a child in utero, at such a time, must make up their minds to find the parts engaged in expelling the child at the end of the ninth month, the usual period of gestation, to be in a very different state as well as situation at the end of the seventh month. They may have to overcome some trifling disorganisation or displacement which would baffle them, if not frighten them; and it will require all their energy, and call into action all their anatomical knowledge of the parts, as well as their moral courage, to overcome; as in the last stage of pregnancy we find the uterus firm and stationary, the membrane distended, tense, and easily ruptured; but, at the seventh month, the uterus is much higher, movable, the neck long and not so easy to be entered, the membrane not so full and flaccid, and not to be broken without some difficulty; and all these difficulties are increased by the deformity or contraction of the pelvis. This state and situation of the parts are all supposed to be known by the practitioner and reader, and may be considered unnecessary; but I believe there are tyros in the practice of midwifery among your readers as well as veterans, and practical information is far more valuable to a tyro than the more scientific, which is often obscure and unintelligible, although this practical information may be given by a practitioner who cannot attach many letters of the alphabet to the end of his name, nor boast of being a fellow of the Royal College of Surgeons.

The subject of the following case, which occurred in my practice a few days since, was a married woman about thirty-five years of age. She had had a living child, at the full period of gestation, about ten years before, but the child was small and she had a very lingering labour. She has been five times since in the family way, and four fine children have been destroyed by the operation of craniotomy—two by two different practitioners, and two by myself. This destruction of life was from dire necessity, and, in consequence of the immense size of the child and the deformity of the pelvis, in order to save the life of the mother. The dimension of the pelvis was lessened by the distortion of the sacrum, and the dipping of the pelvis, and the child's head, with all the uterine efforts of the mother, could not be got into the cavity of the pelvis; her children always rested at the brim. With one of them long forceps was tried, but with no good effect; it was impossible to get the head down without reducing its size. As I had given her to understand that I should not attend her again to be accessory to another murder, unless she would allow me to bring on labour about the seventh month of her pregnancy, to my surprise, when she was about five months gone with the last child, she called on me, as she said, to get me to do what I had told her—to bring away the child. I told her what I intended doing must be done at her own house, and I would call on her at the proper time. On Monday, the 7th inst., I called on her, and, on our reckoning together, I thought she was gone about thirty-six weeks. As she seemed very anxious that the job (as she called it) should be over, I fixed Thursday, the 10th, on which day I found her in bed ready for me, with the nurse in attendance. She was very large; and I expected a large quantity of liquor amnii would be discharged, and anticipated no difficulty; but I was mistaken. On examination per vaginam, I could not discover the os uteri by the fingers: I was obliged to pass the hand into the cavity of the pelvis, when I found something pendulous, which I could not at first recognise. It turned out to be the neck of the uterus, at least three inches long, and the uterus high above the brim of the pelvis. From the pendulous state of the neck I was embarrassed as to how I was to get my fingers in; after some time, I succeeded in getting in two, but did not get into the uterus, or reach the membrane. Knowing well the capacity of this woman's vagina and pelvis, I had anticipated no difficulty, and had only provided myself with a stiff bougie. This soon became useless, from the heat of the parts. I had in my pocket-case a pair of blunt pliers or forceps, with handles like scissors, about five inches long. These I introduced up the neck of the uterus; but did not rupture the membrane. I then introduced two fingers of the other hand, and expanded the forceps, which then caught hold of a fold of the membrane, and immediately a large quantity of the liquor amnii ran down my arm. Having now accomplished the object I had in view, I withdrew my hand, and left nature to do the rest. I believe if I had used a more pointed instrument, I should have done some mischief to the child, as it would not have penetrated the membrane, unless it had met with some resistance, and that must have been the child. The patient bore the operation very well. The next day I found her rather feverish and excited. I sent her a saline aperient mixture, and she went on very well till Sunday morning, the 13th, the third day after the breaking of the waters. Her husband came for me about 11 o'clock a.m., to say that labour pains came on about 8 o'clock, and the nurse thought that I had better come directly. I was with her about twelve, and was then told that the pains were strong and regular. On examination I found the head presenting. It had passed the brim of the pelvis, and was advancing into the cavity; the scalp was puckered, which was a strong proof that the head was forcing through a small outlet; the action of the uterus was very powerful, and the pains did good; and, in less than an hour, the head was in the cavity of the pelvis, and then two or three pains finished the labour, and my patient was the living mother of a living and well-formed daughter, both, up to the present time, doing well. The mother has not had a bad symptom, and the child sucks well and grows. The size of the child's head, when born, was 13 inches round, from the occipitis behind the ears, and 7½ inches across, from the middle of the forehead to the occipitis. All this woman's children that had been destroyed were large. I fear I have been too long and too minute in detailing this case, and it will occupy too much room to insure insertion in the *Medical Times;* but, I am very anxious that the history of this case should come before the profession, through the same medium as your critic on the craniotomy cases. I, therefore, shall feel obliged by your giving it room in one of your early numbers.

I am, Sir, &c. GEORGE KING.

Bath, Oct. 21, 1850.

MEDICAL PROTECTION SOCIETY.

[To the Editor of the Medical Times.]

The Provisional Committee of the Medical Protection Society present their compliments to the Editor of the *Medical Times*, and trust he will have the goodness to insert the two accompanying letters, as a reply to the various injurious reports which have occasionally appeared in the *Medical Times* concerning the proceedings of the Provisional Committee.

Lincoln's-inn-fields, Nov. 13, 1850.

43, Lincoln's-inn-fields, Nov. 11, 1850.

SIR,—I am instructed by the Provisional Committee to inform you that, by the noble conduct of the Chairman, which enables them to do it, it is their intention to pay your account against the Manager of the late Medical Protection Office, in full, under the following conditions:—

A subscription of a guinea a year, to commence from the present time, and a promise on your part to give your best support to the Society by sending in your debts for collection, and by every other means in your power.

A similar letter has been sent to the other medical creditors, and the above proposition of paying the creditors in full can only be carried out by the great body of the creditors and other members of the profession, acceding to these conditions.

This being an entirely new Society, it perhaps may be as well to state, that its management will be vested in trustees of known standing and responsibility, and a committee, whose names will shortly be published.

An answer by return of post is requested, in order to facilitate these arrangements.—I am, Sir, &c.,

W. GREEN, Secretary *pro. tem.*

The above has been sent to all creditors up to 10*l.*

43, Lincoln's-inn-fields.

Sir,—I am directed by the Committee to inform you, that the enclosed note has been sent to every claimant of the Medical Protection Office not exceeding the sum of 10*l.* I am also desired to

state, the Committee have satisfactorily arranged with the comparatively few claimants above that sum: and the kindness and liberality evinced by those gentlemen demand from the Committee the expression of their warmest acknowledgments.

Legal difficulties rendered it imperative (though contrary to the first intentions of the Committee) to arrange with the trade creditors and others before the interests of member-creditors could be safely dealt with. These complicated matters have required great labour and caution to conduct to what it is hoped will lead to a beneficial and satisfactory conclusion, and have of necessity occupied considerable time.

The sum required to carry out these measures will be very large, and they can only be accomplished by the magnanimous liberality of the Chairman, and considerable personal responsibility of the members of the Committee.

In consideration of these facts, some members claiming under 10*l.* have kindly proposed that part of their claim should remain and be placed in the same account as the sums due to the creditors above that amount, to be liquidated in the same manner, viz., as the profits of the institution will permit; and *for this* it affords the Committee satisfaction to state, that the period likely to be required will be very limited.

The re-organised society will be placed under the control and management of a body of *responsible* trustees—men whose names are honoured by the profession—and a responsible Committee. (The names of the trustees, the committee, and solicitor will shortly be published.)

The business of the Society will be conducted on principles that will safely guard the interests of its members, and ensure the stability of an institution, the power of which will reach every town and hamlet in the kingdom, and which the Committee confidently believe will preserve to its members collectively many thousands a year, and from which, ere long, will spring a *charity* worthy their country and profession.

I am also desired to state, that the reasons the Committee had for venturing on a difficult and laborious undertaking were chiefly that a large amount of business remained in the office; and so considerable a number of members remained organised, that they believed, with energy and the aid of capital, the institution might be made to realise the hopes of its early supporters, and a large amount of money be saved to the members which must otherwise be irretrievably lost.

In conclusion, I have earnestly to solicit an immediate reply, stating whether the Committee may rely on the favour of your support and influence, and if you will permit your name to be added to the list of members.—I am, Sir, &c.,

W. Green, Secretary *pro tem*.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET. HANOVER-SQUARE.

Saturday, November 9, 1850.

Dr. J. R. Bennett, President, in the Chair.

Dr. Grant was unanimously elected an honorary fellow. The President announced that the portrait of Dr. Clutterbuck, which was hanging up in the room, had been presented by the subscribers to the Society.

HEALTH OF LONDON.—DEBATE ON DR. WEBSTER'S PAPER.

Dr. Hare introduced the subject by impugning the correctness of Dr. Webster's conclusions respecting the comparative mortality of the University College and the Free Hospitals. Dr. Webster had incorrectly stated the number of beds in University College Hospital; instead of 106, there were 122; and at the present time there were 112 patients in the house. He afterwards adverted to the plan adopted by Dr. Webster for ascertaining the rate of mortality, by comparing the number of deaths with that of the beds, instead of the number of patients admitted, and showed that it was fallacious. In the Royal Free Hospital there were 140 beds, but at Christmas last year only 46 patients, and in March last 52 only. There would be a great difference in the results as to the ratio of mortality, according as the number of beds or of patients were taken as the basis of the calculations. Many causes operated to influence the mortality, such as the nature of the cases admitted—medical diseases being more fatal than surgical, except they be instances of very severe accidents. In the London Hospital the rate of mortality was 82 per cent.; and in the Small-pox and Fever Hospitals, 302 and 304 per cent. Again, some patients are admitted when almost dying, and others leave the hospital in that state. Hospital mortality statistics must, therefore, be very deceptive from all these causes, and Dr. Webster's were no exception to the rule.

Dr. Sibson was fully persuaded from experience of the inaccuracy of mortality statistics for hospitals; which would continue until accurate statistical returns were issued by all these institutions. The mortality of any given hospital may be kept down by the dismissal of the dying, and the selection of cases likely to do well. Patients of themselves, when past recovery, often leave the hospital to die surrounded by their friends, and thus again the mortality is kept under. The mortality tables, at all events, should be calculated from the number of patients, and not from the number of beds, or they could not even approach accuracy.

Dr. Webster had made every effort to be accurate, but it is sometimes very difficult to get at facts. With respect to University College Hospital, he had been informed in writing by one of its officers, that they had 106 beds. That letter was still in his possession. Wherever his figures were wrong, he (Dr. Webster) would be ready to correct them. He had not succeeded in obtaining the numbers of patients admitted into hospitals; but he trusted that accurate statements respecting all these points would be issued by the hospital authorities.

Dr. Bennett said, that had been done long since by the three Royal hospitals.

DISLOCATION OF THE GREAT TOE.

Mr. Coulson exhibited two specimens of this dislocation connected with bunion, and drew the attention of the fellows to the condition of the bones, cartilages, and ligaments. In some cases of bunion the great toe is twisted over or under the next to it; the ball of the toe becomes larger, the deformity increases, and the foot generally loses power. After a time, the internal lateral ligament yields, then dislocation occurs, the bursa enlarges, inflammation and even ulceration follow, and the internal condyle of the metatarsal bone may be exposed. On examining the joint, the enlargement is found to be more apparent than real; the inner condyle of that bone always, and the outer often, project beyond the articulating surface of the first phalanx, the extent of the latter not being proportionate to that of the former. The articular surface of the metatarsal bone represents a pulley, with an elevated ridge in the centre. The axes of the bones do not coincide, so that a slight displacement induces great deformity. In very bad cases, the articulating surface of the phalanx remains in the outer portion of the metatarsal bone; the synovial membrane is in some degree absorbed, the cartilages become thin and disappear, and the ends of the bones are eburnated. The specimens on the table illustrated these changes. The internal lateral ligaments were thinner than usual, and spread out, and absorption of the cartilages had commenced. With respect to the cause, Mr. Coulson stated, that wearing shoes had nothing to do with it; and he cited in proof the case of a mulatto who was nearly lamed by it, yet had never worn shoes. It has been said that the inner plantar ligament is pressed by the projecting downwards of the head of the astragalus, and that the ligaments of the toes, chiefly of the great toe, are thereby weakened, the bone itself being forced outwards by the oblique movement of the foot on the inner plantar surface; but Mr. Coulson could not see why the ligaments of the toes should yield, even if the calcaneo-scaphoid ligament were pressed upon, but was inclined to refer it to a giving way and weakening of the muscles acting on the great toe and metatarsal bone. The transverse and oblique muscles, he said, lose their power, the ends of the bones are not held together by them, the foot spreads and is deformed, the inner condyle projects, and the phalanges are carried outwards.

Mr. J. B. Brown read a paper

ON THE TREATMENT OF OVARIAN DROPSY BY THE FORMATION OF AN ARTIFICIAL OVIDUCT.

The author of this paper took occasion at the outset to correct any erroneous notion that might arise, that this operation is to set aside the treatment by pressure, so long advocated by him, and of the utility of which he was every day becoming more convinced. The plan he at present proposed was a modification of an operation, twice performed by Mr. Bainbridge, of Liverpool, as reported in the *Provincial Medical Journal*. Mr. Bainbridge made an incision into the ovarian sac in the median line, and there formed a

fistulous opening, through which the sac might suppurate away. The position of the opening necessitated the maintenance of the prone position for a considerable period, and was so far very inconvenient. This, it occurred to Mr. Brown, might be avoided by making the incision lateral, about the semilunar line. In a case which occurred to him soon after this plan of operating had presented itself to his mind, it was successfully resorted to, although the patient subsequently sank from the existence of severe organic disease, especially of the heart. But to describe the operation more in detail, as given by Mr. Brown :—an oblique incision, about two inches in length, is made down to the peritoneum, extending over the middle third of a line drawn between the umbilicus and the anterior superior iliac spine ; a trocar is then introduced, and the cyst emptied ; the peritoneum being then divided and reflected, the sac is next stitched by several sutures to the aponeurotic tendon of the external oblique muscle of the abdomen. This being done, the wall of the cyst itself is divided, midway between the opposite lines of the sutures; and, lastly, a pledget of lint is introduced within the wound to keep it open. Mr. Brown, in his first operation, made a second shorter incision, at nearly right angles to the oblique one described, but his subsequent experience led him to recommend the single oblique incision as sufficient. The first case was of long standing, and multilocular with adhesions, forbidding the operation of ovariotomy, whilst the debilitated and diseased condition of the patient contra-indicated the application of pressure. This patient, having progressed favourably for the first five days, afterwards receded in health, and sank a month from the date of the operation, worn out chiefly by the disease of the heart, which had, during life, been diagnosed by Dr. Sibson, from the frequent faintings and dyspnœa which she suffered. The notes of the autopsy stated the diaphragm to be pushed up by the enlarged liver to a level with the third rib, whilst the base of the heart reached to between the first and second ribs. The lungs were, moreover, adherent pretty generally to the plenræ; the left lung was congested and partly puckered up, containing but little air. In the second illustrative case mentioned by Mr. Brown, the patient had multilocular disease with adhesions, which, from the history, appeared to be of old date. An apparently solid tumour existed in the cyst, which could be felt, when the operation was performed, through the opening. At the close of the first fortnight from the date of operating, which had passed over satisfactorily, the patient, besides getting a severe cold, had a considerable portion of the discharge, which should have escaped, retained in a compartment of the sac, which had been formed by adhesions set up between the enclosed solid tumour and the cyst-wall cutting off communication with the external opening. These adhesions having been broken down, and the sac allowed to empty itself, the progress of the patient became again favourable, save only that she suffered from frequent bilious vomiting, attended with much prostration. At the end of May, the operation having been performed on the 18th of April, she had so far regained her health and strength as to be able to go out and take walking exercise almost daily. In July the great cyst was extruded through the wound, and came away in a decomposed state. From this time the discharge became trifling, and it was only by the careful and daily introduction of fresh pledgets of lint that the wound could be kept open. In August, a general breaking up of the patient's health became evident; she had incessant vomiting for three or four days, and partial paralysis of the left side. Little relief could be afforded ; and, after lying in a comatose condition for three or four days, she sank, apparently from exhaustion. At the *post-mortem* examination, a cyst, which would contain an orange, was found occupying the right ovary, partly filled with pus, some of which had, however, escaped through a laceration (made in the examination) in the posterior, soft, and disorganised wall of the cyst. No signs of peritonitis existed; but the sac had contracted adhesions in the whole region around the incision, which, with the fistulous canal, was in a healthy state. In this instance, the operation was pronounced successful by Mr. Fergusson, Mr. Ure, and other medical gentlemen who saw the patient; Mr. Brown attributed the fatal result to the previously debilitated constitution of the patient, and co-existing functional and organic disease. Mr. Brown's third case adduced was unfortunate, so far as the final result was concerned, although the operation *per se* might be called successful. It was an instance of severe multilocular disease, and held out little encouragement for operating, owing to the weak state of the patient. The patient died about a month after the operation, exhausted by the discharge. The *post-mortem* examination proved the severe nature of the disease; the cyst was adherent on its right side by firm adhesions, and, in attempting to rupture them, the cyst was itself torn, and discharged purulent matter. The sac was also found to be made up of numerous smaller ones, and a small cyst occupied the other ovary. Mr. Brown believed that the patient would not have long survived, even if no operation had been tried.

At the conclusion of the paper, Mr, Brown gave some general practical deductions, viz. :—

1. That the operation by pressure, as advocated by him, is applicable as a remedy in certain cases of ovarian dropsy ; for example, where the disease is unilocular, without adhesions, and the fluid contents of the cyst are clear and not albuminous,—time, and the condition of the patient otherwise, not contra-indicating.

2. That pressure will relieve and retard ovarian disease, even when it is multilocular, and adhesions exist.

3. That, where pressure has failed, or is contra-indicated, and the cyst or cysts are without adhesions, extirpation is a remedy which may be adopted; but, before doing so, except in rare cases, pressure should have a trial.

4. That where the extent and character of the adhesions are such as to forbid extirpation, and pressure has failed, or is inapplicable, from any cause, the lateral operation described affords a ready and promising means of cure.

5. That this mode of operating is attended with but slight danger, besides being easy of execution. In support of his position, that the danger is small, Mr. Brown stated, that, in the many operations in which he had had occasion to cut through the peritoneum, no untoward result had followed.

Mr. Hird remarked on the peculiarity that a fatal result attended all the three cases in which Mr. Brown had operated. He thought that in the first case, had the internal disease been of long standing, it would have been detected at the consultation before the operation, and would have prevented its performance. Such changes frequently follow the opening of any large cyst; and yet, because in this case they did not occur until two or three weeks after the aperture had been made, it was asserted that the operation was successful, death resulting from previous disease. In one of the other cases life was more protracted, but the symptoms which occurred were precisely those of a system broken down by disease. The cases operated on by Mr. Bainbridge were also unsuccessful; and this result had led to the question, Is an operation advisable in these cases? Ovariotomy was recommended in some cases, but he (Mr. Hird) thought the published and unpublished results proved that it was very uncertain, and ought not to be performed. He was inclined to think well of pressure, recommended by Mr. Brown, in the treatment of the disease. It was not dangerous, and might be useful. Patients he thought more likely to live longer when not operated on at all, nothing being done beyond constitutional treatment. They had, at all events, a much better chance.

Mr. Wade alluded to two operations for extirpation at which he assisted a few years ago. In the first, the tumour, which was supposed to be ovarian, was discovered, after the incision had been practised, to be a large fibrous tumour of the uterus attached by a pedicle. The operator, undeterred, removed it, after placing a ligature round the pedicle. For two days the patient did well, but then suddenly sank, and died with symptoms of collapse. At the autopsy it was ascertained that a portion of the ileum was in contact with the sloughing pedicle, had become involved, and was also sloughing. In the second case, the adhesions were too extensive to admit of extirpation. The wound was therefore closed, and the patient had not a bad symptom. Mr. Brown had used an iodide injection in one case. He (Mr. Wade) had seen very dangerous consequences follow injecting ovarian cysts, and objected to the practice. In one case, the inflammation which was excited proved fatal in a week's time. He agreed with Mr. Hird, that constitutional measures alone should be employed, all local interfence being avoided, unless the cyst be inflamed, when leeches, &c., may be used. The operation by Mr. Jeaffreson, of Framlingham, repeated by Mr. King, of Saxmundham, was the most simple, but only applicable to unilocular cysts. When tapping a patient the cyst protruded; he enlarged the wound, drew out the cyst, and removed it.

Dr. Snow was opposed to the performance of extirpation; of four operations at which he was present, not one of the patients was now living. Two or three of these could not, however, have survived long, even if the operation had not been done. He could not call that operation successful, which the sufferer did not survive more than a month or two, although there were serious internal disease.

Dr. Tilt was strongly opposed to the adoption of Mr. Brown's operation, which he thought was mainly instru-

mental in causing the deaths of his patients. Too much was done, because the cyst was kept open, and air freely admitted; the pus consequently became fetid, and in at least one case inflammation and ulceration were set up as a consequence. On the other hand, too little was done, as the diseased growth was not removed. That was done in ovariotomy, which consequently offered a chance of cure to the sufferer. In the third case, the operation should not have been done, as, it being a multilocular cyst, if one had been opened and cured, there would still have been the others to deal with. The operation seemed to have been done for the mere pleasure of operating. Mr. Brown, before he brought forward his paper, should have ascertained the results of Mr. Bainbridge's cases.

Dr. Pettigrew commended Mr. Brown's moral courage in publishing his unsuccessful cases, and considered that experience justified the extirpation of ovarian tumour. Of five successful cases in which he assisted Mr. Lane, four were now living; the fifth died a year after of lung-disease. In a sixth case death occurred the next day; the tumour was very large and the adhesions very extensive. In three other instances a long exploratory incision showed such extensive adhesions that the wound was closed. The patients got well without a bad symptom. In fact a large wound of the peritoneum may be made with greater impunity than a small one. Of these three patients, two are now living. One was found dead in bed. He then mentioned the case of a female, in whom the contents of the cyst were discharged through the bladder. The patient recovered. In another case, after symptoms of suppuration, perceiving a bulging of the vaginal parietes, he punctured them with a trocar; pus following, he incised them, and drew off two pints of pus. After some time, the discharge gradually diminished, and the patient was cured. He, in operating for hydrocele, cuts out an elliptical portion of the vaginal tunic, and places a bit of lint on it. This is successful; and he thought the same thing might be done in ovarian disease, were it not for the difficulty of diagnosis, which renders it impossible beforehand to be certain whether the cyst is unilocular or multilocular, whether its contents are fluid or solid.

Mr. Shearly mentioned a case of large hydatid of the liver, mistaken by Dr. Croft for ovarian disease. This seemed to show the difficulty of diagnosis.

Dr. Murphy considered Mr. Brown's cases were themselves in opposition to his operation: they were not fit for such a proceeding; for, supposing recovery from the operation to follow, only one cyst in multilocular disease was closed, and others still remained. There is, therefore, but the alternative of tapping, and then employing pressure, or ovariotomy. The latter is a formidable operation, but it removes the disease entirely.

Mr. Nunn, in expressing his opinion, with respect to diagnosis, thought that the disease, although it might be unilocular at first, soon became multilocular, because, when the tendency to disease has been excited, additional cysts soon form. The *rationale* of Mr. Brown's operation was to furnish a permanent external opening for the discharge of the ovarian contents.

Mr. Clarke highly commended Mr. Brown for the publication of his unsuccessful cases.

Mr. Chippendale reminded the society that these cysts are lined with a serous membrane, and are generally large, containing from seven to eight pints of fluid. The danger in opening them being in proportion to their size,—although they may be opened with almost impunity, if closed again directly,—yet, if left open, the risk of inflammation would be very great. There is a large surface of serous membrane exposed to the influence of the air, which induces inflammation, and the secretion of fetid pus. The latter gets absorbed into the system, the usual train of symptoms follows, and death ensues. All cysts or tumours containing pus near the rectum, are fetid from that cause, so that the purulent fluid is offensive from the beginning.

Dr. Knox made some remarks on ovarian disease, which were quite inaudible at the distance of even a few feet.

Mr. Brown contended that the principle of his operation was good and would ultimately succeed, though it had hitherto failed in his hands. Mr. Bainbridge had published a successful case in the *Provincial Medical Journal*, and there have also been published many cases in which the cyst had burst, had discharged its contents through different canals, and the patients had done well. He thought it possible he had made too large an aperture, and should make a smaller one next time. He had also determined not to use injections in future, as they were injurious.

PHARMACEUTICAL SOCIETY.

Wednesday, November 13.

Mr. Ince, President, in the Chair.

POISONOUS PROPERTY OF SULPHITE OF LEAD.

Mr. Greaves communicated the result of some experiments he had made by administering sulphite of lead to dogs. At a previous meeting of the Society Mr. Redwood had shown, that sulphite of lead is readily decomposed, and the lead rendered soluble when exposed to the action of hydrochloric acid and other agents which it would be likely to encounter in passing through the intestinal canal; from which it was inferred, that this salt of lead, the presence of which had been proved in sugar made by Dr. Scoffern's process, could not be, as represented, perfectly innocuous. It still remained, however, to obtain direct evidence of the action of sulphite of lead on the animal system, and this was the object of Mr. Greaves's experiments.

To a young, strong, and healthy dog, twenty grains of sulphite of lead were given daily, mixed with the food. Symptoms of suffering were indicated on the seventh day, which continued, with intermissions, until the fourteenth day, when he died, apparently in great suffering. Portions of the liver, and also of the brain, were examined after death, and clear proof of the presence of lead was obtained.

To another animal, an old dog, the same quantity of sulphite of lead was given daily in the food, and a drachm of ointment, consisting of equal parts of the sulphite and of lard, was rubbed over the surface of the skin. No indications of indisposition were observed until the fifteenth day, when he refused to take his food. He now became drowsy and inactive, and for two days refused to take the food in which the sulphite was contained. On the eighteenth and nineteenth days he reluctantly took small portions of the food, but continued in the same inactive state. In the latter part of the last-named day he became more lively and barked, but subsequently relapsed into his previous state of inactivity, manifested a difficulty in rising on to his feet, and soon afterwards died. On examining the liver after death, abundant evidence of the presence of lead was obtained.

Both the dogs had lost weight during the period that they were under treatment.

Dr. Alfred Taylor said, it was very satisfactory to him to find that the conclusions which had been come to by himself and the other medical men employed by the Government were fully substantiated by the results which had just been communicated to the meeting. He had no doubt the subject would soon be brought under the notice of the Legislature, when the results of experiments such as those described would be of great importance in leading to a just decision. Had it not been for the steps which had been taken to investigate this subject, there was reason to believe that hundreds of cases of lead colic would have occurred through the country, from the use of sugar containing sulphite of lead.

ON EXTRACT OF HEMLOCK.

A paper was read by Mr. W. Archer, in which the author endeavoured to show, by a series of experiments, first, that the best means of inspissating hemlock juice is to subject it, placed in shallow vessels, to the influence of a continuous current of warm dry air; secondly, that an extract possessing greater activity in equal doses than that generally met with in commerce, may be obtained by removing the albumen and chlorophyle from the expressed juice, before evaporating it; and, thirdly, that strong rectified spirit is the best menstruum with which to extract the active principle of hemlock in making the tincture of that herb.

ON LOBELINA, A VOLATILE ORGANIC BASE FROM LOBELIA INFLATA.

By MR. WILLIAM BASTICK.

After several preliminary experiments to ascertain the nature of the active principle of lobelia inflata, the author

states that he adopted, with perfect success, the following process for its extraction :—

Macerate two pounds of the herb in a gallon of alcohol, to which previously has been added three ounces of sulphuric acid, for forty-eight hours. Drain the alcoholic solution from the herb, and filter. Mix with it powdered caustic lime with continued agitation, until the fluid has an alkaline reaction. Again filter, and saturate the filtrate with sulphuric acid in slight excess. After having filtered this acid solution, evaporate with a gentle heat until it is reduced to about one-fourth. To the residue add a little water, and again evaporate until all traces of the alchohol have disappeared. Filter to remove the resin which has been precipitated by the water. Then carefully saturate the filtrate with a concentrated solution of carbonate of potash, and, if a precipitate ensues, the liquid must be again filtered. Mix the filtrate with a considerable excess of carbonate of potash. Treat the liquid with successive portions of ether by constant agitation, until it no longer dissolves anything thereout. By evaporating the ethereal solution spontaneously, the organic base lobelina remains. It is now nearly pure, except containing colouring matter, of which it may be deprived by dissolving it in alcohol, and agitating the solution with purified animal charcoal until decolorized. Lobelina is an oily viscid transparent fluid, with a strong alkaline reaction, especially in a state of solution. It smells slightly of the plant in a pure state, but mixed with ammonia it gives out strongly the odour of the herb. It tastes pungent and tobacco-like, and, when taken internally in minute doses, it exercises on the human frame all the marked and disagreeable consequences of a large dose of the plant. It is, therefore, doubtless, a virulent poison. With acids lobelina thoroughly performs the part of a strong base, by neutralising them. It is precipitated from its solution by infusion of nut-galls in the form of white flocks. It is also thrown down by ammonia, but not permanently, from a concentrated aqueous solution of its salts. All its combinations with mineral acids are soluble in water and alcohol. When its salts are thoroughly decolorized by animal charcoal they are crystallizable. The hydrochlorate of lobelina forms colourless, transparent, acicular, well-defined crystals. In this respect, lobelina differs from nicotina and also from conia.

THE NEW DUBLIN PHARMACOPŒIA.

Mr. Squire read a paper on this subject, in which he pointed out the alterations which have been made in this work as compared with its predecessor, and the discrepancies which still exist between the formulæ authorised by the Irish College of Physicians and those of the London and Edinburgh Colleges. He alluded to the evils which these discrepancies are likely to produce; and strongly insisted on the importance of having a national pharmacopœia for the whole of the United Kingdom.

The discussion of the subject was adjourned to the next meeting.

RULES AND REGULATIONS OF THE ROYAL COLLEGE OF SURGEONS, EDINBURGH.

SCHOOLS OF MEDICINE.

1. Every candidate for a surgical diploma must have followed the course of study to be specified afterwards in a university; or in an established school of medicine, as defined below; or in a provincial school specially recognised by the college.

2. Under the title, established school of medicine, are comprehended the medical schools of those cities of Great Britain and Ireland in which diplomas in surgery are granted, and such foreign schools as are similarly circumstanced in the countries in which they exist.

QUALIFICATIONS OF TEACHERS.

1. The following classes of persons shall be entitled to give lectures which may be attended as part of the course of study :—1st. In the Universities of Great Britain and Ireland, in University College and King's College, London, in Queen's College, Birmingham, and in the Queen's Colleges of Cork, Belfast, and Galway in Ireland, the professors of those institutions. 2nd. In Edinburgh, resident fellows of the Royal College of Physicians of Edinburgh, and fellows of the Royal College of Surgeons of Edinburgh, whose lectures have been sanctioned by the college to which each lecturer belongs.(a) 3rd. In London, fellows and licentiates of the Royal College of Physicians of London, and fellows and members of the Royal College of Surgeons of England whose status as teachers has been admitted by that College. 4th. In Dublin, fellows of King's and Queen's College of Physicians in Ireland, and fellows of the Royal College of Surgeons in Ireland. 5th. In Glasgow, members of the Faculty of Physicians and Surgeons of that city. 6th. In recognised provincial schools, teachers whose status as such has been admitted by the college on special application.(b)

2. The college will not recognise any course of lectures, delivered subsequently to 1st May, 1839, by a professor or teacher who lectures upon more than one of the branches of instruction included in their curriculum: nor will they recognise any course of lectures delivered by a professor or teacher who, in addition to the said course, lectures upon a branch of instruction, medical or general, not included in the curriculum, unless such professor or teacher shall have obtained special leave from the college to do so.

3. Notwithstanding the above regulation, the teaching of two branches, as in the following instances, may be undertaken by one individual without disqualification being incurred, viz. :—Anatomy and practical anatomy, chemistry and practical chemistry, practice of medicine and clinical medicine, practice of surgery and clinical surgery, mathematics and mechanical philosophy, and, for the present, clinical medicine or clinical surgery may be taught in conjunction with any one of the other courses of education prescribed by the curriculum, by a physician or surgeon qualified according to the regulations of the college, and attached to a public hospital of the size which those regulations prescribe.(c)

COURSE OF STUDY.

1. *Preliminary Instruction.*—Every candidate for the diploma of the Royal College must, either previously to or during his medical education, have received regular instruction in the elements of mathematics; and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures. He must also have been well instructed in the Latin language.

2. *Professional Instruction.*—The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months; in which must have been included three winter sessions of six months' duration each:—

Anatomy, two courses,(d) six months each. Practical anatomy, twelve months. Chemistry, one course, six months. Practical Chemistry, (the number of pupils in each class being limited to twenty-five) one course, three months. Materia Medica and Pharmacy, one course, six months. Institutions of Medicine, or Physiology, one course, six months. Practice of Medicine, one course, six months. Clinical Medicine, (e) one course, six months; or two courses, (d) three months each; during the period of his attendance at the hospital where they are delivered. Principles and Practice of Surgery, two courses,(d) six months each; or Principles and Practice of Surgery, and Military Surgery,(f) one course,(d) six months each. Clinical Surgery,(e) one course, six months; or two courses,(d) three months each; during the period of his attendance at the hospital where they are delivered. Midwifery and Diseases of Women and Children, one course, three months. Medical Jurisprudence, one course, three months.

Besides the above mentioned courses of lectures, the candidate must have attended a course of instruction in practical pharmacy,

(a) The College enacted, in 1846, statutes regarding the manner of sanctioning lecturers and teachers. These statutes are printed separately.

(b) The only lecturers excepted from this law are those on mechanical philosophy and on chemistry. The former may be professors in universities, lecturers in public institutions, or teachers specially recognised by the college; and the latter may be persons non-medical, if recognised by the college jointly with the College of Physicians, in conformity with statutes enacted in May 1847, and printed separately.

(c) In making the above concession respecting clinical medicine and clinical surgery, the college wish it to be understood that this is done rather in consideration of the present state and arrangements of existing schools, than from their entertaining any doubt that the teaching of either of those branches, in addition to his hospital duties, would afford ample occupation for a teacher.

(d) The two courses must not be simultaneous.

(e) Clinical Medicine and Clinical Surgery must not be attended at the same time.

(f) The Course of Military Surgery must be delivered by a professor of that branch in a university; or by a lecturer who, in addition to the other requisite qualifications, has served in the Medical Department of the Army or Navy; and the course must be of at least six months' duration, and comprehend not fewer than sixty lectures.

at the laboratory of a surgeon or apothecary; or of a chemist or druggist recognised by the college on special application; or of a public hospital or dispensary; and he must produce evidence that he has been engaged in compounding and dispensing medicines for the space of six months. Those who produce certificates of having been, for the space of at least two years, private pupils or apprentices to regularly licensed medical practitioners, keeping laboratories for dispensing medicines, shall be exempted from attendance on this branch of instruction.

3. The six months' courses delivered in Edinburgh must consist of not fewer than 110 lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three months' courses must consist of not fewer than sixty lectures. Two London courses, of three months each, on any of the above subjects, will be taken as equivalent to one six months' course.

4. The candidate must also have attended, for twenty-one months, a public general hospital containing, at an average, eighty patients.

5. The following order of study is recommended as a guide to the student, though not absolutely enjoined :—

First year—Anatomy, Chemistry, Mechanical Philosophy, if not previously attended, Practical Chemistry, either in this or the second year. Second year—Anatomy, Practical Anatomy, Institutions of Medicine or Physiology, Surgery, Materia Medica and Pharmacy, either in this or the third year, Hospital. Third year—Practice of Physic, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Hospital. Fourth year—Surgery or Military Surgery, Midwifery and the Diseases of Women and Children, Clinical Medicine, Medical Jurisprudence, Hospital.

6. The college strongly recommend to students to avail themselves of any opportunities which they may possess of attending lectures on botany, natural history or natural science, comparative anatomy, and pathological anatomy, in addition to the courses of lectures which are absolutely required by the above regulations.

REGISTRATION AND CERTIFICATES.

1. A book shall be kept in the hall of the college for the registration, at stated times, of all medical students who may apply. In this book all Edinburgh students who desire to possess the diploma of the college must enter their names, and the classes which they attend, whether under professors in the university, or under other qualified teachers.

2. The registration shall be conducted by the conservator of the museum, or by a substitute, for whom he shall be responsible. He shall enter in separate columns—1st. The name of each individual; 2nd. The medical classes, hospitals, and dispensaries attended by each during the current season; 3rd. The names of the teachers. He shall register such only as apply personally to him, shall examine all the tickets produced by each individual, and shall not register any classes for which tickets are not produced.

3. At the close of each session students shall produce to the registrar the certificates of attendance they may have received from their respective teachers, (see Appendix,) the terms of which shall be entered in the registration-book.

4. Each student shall pay annually, on his first registration for the year, the sum of 5s., and shall be provided with a ticket of admission to the museum.

5. The book shall be closed for the registration of the winter classes on the 30th of November in each year; and of the summer, or intermediate classes, at the end of the *second* week from their commencement.

6. When a student is prevented by sickness, or any other unavoidable cause, from complying with the above regulations, he shall, *as soon as the case admits*, present a statement of the circumstances, with proper evidence, to the conservator, to be laid by him before the registration committee, who shall report their opinion to the college; and, if the application be sustained, the individual so applying shall be enrolled in the usual manner.

7. All students whose classes are thus registered shall be entitled to receive from the conservator certificates of their courses of study, attested by his signature; but no class shall be included in such certificates unless actual attendance thereon have been previously attested by the professor or lecturer. No fee is exacted for these certificates.

8. Such certificates will be required from all candidates for surgical diplomas, in regard to that part of their medical education which they may have received at Edinburgh. Similar certificates will be received from any other schools in which registration-books are kept, in regard to such portions of the course of study as the certificates may embrace. Candidates educated at schools where no registration-books are kept, must produce certificates from the respective professors or lecturers, both of their having entered to their several classes at an early period of the course, and also of their having attended those classes with due regularity. And in the case of practical anatomy, the certificate must express that the candidate has, during the course of his attendance, been actually engaged in the dissection of the human body, under the personal superintendence of the professor or teacher.

EXEMPTIONS.

Candidates who have commenced attendance on their medical classes, or at an hospital containing at least eighty beds, or who have entered into indentures of apprenticeship to a regular surgeon previously to the following dates, are entitled to the exemptions which are specified :—

Exemptions.—Date previously to 29th Sept. 1838.—1. From more than four winter sessions' attendance on a school of medicine. 2. From more than eighteen months of hospital attendance. 3. From more than six months of practical anatomy. 4. From the necessity of producing a certificate of age. September, 1833.—*5.* Also from practical pharmacy. 1st August, 1831. —6. Also from medical jurisprudence.

EXAMINATIONS.

1. The days of examination are the first and third Tuesdays of every month.

2. No candidate will be admitted to examination before the termination of his last year's course of study.

3. Applications for examination must be made to the president at least two days previously to the day of examination.

4. Every candidate, on applying to the president, will be required.—1st. To produce satisfactory evidence of his having attained the age of twenty-one years; and, 2nd. To present a tahular statement (for which a printed form will be furnished by the conservator) exhibiting the full amount of his professional education, as well as a separate list of all the classes, hospitals, and dispensaries, attended during each session of his studies. If he have been an apprentice, he shall also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature.

5. If the candidate has been an apprentice to a fellow of the college for three years, he must also produce his discharged indenture; if for five years, he may apply at the end of four without losing any privilege, provided that he have a written permission from his master. The date of his indenture, and whether it is for the freedom or not, must be certified at the bottom of this written permission by the secretary.

6. On the production of these documents, the president will give the candidate a letter authorising the examinators to take him on trial.

7. The fees payable to the funds of the college must be lodged, before the examination, in the hands of the treasurer, who will certify this upon the president's letter, after inspecting and being satisfied with the certificates. The fees will be returned to unsuccessful candidates, whose names will be concealed.

8. Unsuccessful candidates will be remitted to their studies for a period to be determined by the judgment of the examiners, but not in any case less than three months.

9. The president, if he judge it proper, may order a meeting for examination on any day, at the request of a candidate; but, in that case, the candidate must pay two guineas in addition to the customary fees; and this money will not be returned to him in the event of his being remitted.

10. The college having resolved, on the 22nd October, 1849, to institute an examination in Latin on the second Saturday in December annually, without expense to the students who avail themselves of it, those who desire to do so must inscribe their names, addresses, and places of birth, in the books of the treasurer of the college, two full days prior to the day of the examination. Students intending to take the diploma of the college are recommended to take their Latin examination at as early a period in the course of study as possible.

11. Candidates for the diploma of the college who have taken a degree in arts from a university of Great Britain or of Ireland will be exempted from the examination in Latin.

12. All candidates who have not availed themselves of the opportunities presented to them by the last two regulations, of proving the competency of their knowledge of Latin, will be re-

quired to translate into English a portion of a Latin author at the commencement of their examination for the diploma of licentiate; and if they cannot do so satisfactorily, the examination will not be proceeded with.

13. In order to test more effectually the practical knowledge of the candidates, specimens of anatomy and of the materia medica will be employed during the examinations; and every candidate will be required to write out one or more formulæ of prescription.

FEES PAYABLE BY CANDIDATES.

1. *For a Diploma*, ordinary candidates pay the sum of 7*l.* 5s. After the 15th April, 1850, ordinary candidates will pay 10*l.*

[Apprentices of Fellows of the Royal College, bound for the freedom, pay 25s.; their other apprentices pay 2*l.* 16s. 6d. Assistant-Surgeons in the Navy, having previously obtained certificates from the college, pay 2*l.* 11s. 6d. Surgeons in the Navy, having obtained certificates from the college, pay 15s. 6d.]

2. *For the Certificates of Qualification to act as Assistant-Surgeon in the Navy*, candidates not having paid for any previous qualification, pay 4*l.* 19s. 6d.

3. *For the Certificate of Qualification to act as full Surgeon in the Navy*, assistant-surgeons, who have already obtained certificates from the college, pay 3*l.* 18s. 6d.; and those who have previously obtained the diploma of the college, pay 2*l.* 17s. 6d.

The sums stated above include all fees of every kind, and the officer is prohibited from receiving any.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 8th inst.:—

Allan, Paterson, Waltham Abbey, Essex.
Aspinall, Thomas, Over Darwen, Lancashire.
Button, Arthur Michael, Bury St. Edmunds, Suffolk.
Heath, Richard, London.
Larcombe, Samuel Slee, Langport, Somerset.
MacMullan, Charles Clarke, Belfast.
Morris, Trevor, Chepstow, Monmouthshire.
Preston, Anthony Taylor, Manchester.
Sykes, John, Mile-end-road.
Williams, Joseph, Portloe, Cornwall.

At the same meeting of the Court, Messrs. John Ward and Charles Sayer Hugo passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively May 8, 1846, and March 12, 1847.

Royal Society.—The proposed office-bearers for the ensuing session are:—President: The Earl of Rosse, K.P., M.A.; Treasurer: Lieut.-Col. Edward Sabine, R.A.; Secretaries: Samuel Hunter Christie, Esq., M.A.; Thomas Bell, Esq.; Foreign Secretary: *Captain W. H. Smith, R.N.*; other Members of the Council: John Joseph Bennett, Esq.; *William Bowman, Esq.*; Sir Benjamin Collins Brodie, Bart.; *The Rev. Professor Challis, M.A.*; *Lieut.-Gen. Sir H. Douglas, Bart., G.C.B.*; *Sir P. de Malpas Grey Egerton, Bart.*; John Forbes, M.D.; *Marshal Hall, M.D*; Gideon A. Mantell, Esq., LL.D.; *Professor W. Hallows Miller, M.A.*; Sir R. Impey Murchison, M.A.; *Richard Phillips, Esq.*; Right Hon. Sir Frederick Pollock, M.A.; George Rennie, Esq.; *Edward Solly, Esq.*; *Lord Wrottesley*. The Fellows whose names in the preceding list are printed in italics were not members of the last Council.

Public Dispensary, Carey-street.—At the quarterly meeting, on the 12th inst., it was stated, that the number of persons who have received medicines and advice during the last quarter, has been 1487, of whom 285 have been visited at their own residences. The dispensary has been recently removed from Bishop's-court to Carey-street. The Duke of Cambridge has accepted the patronage of the institution.

Military Appointments.—3rd Dragoon Guards; Surgeon Henry Mapleton, M.D., from the 55th foot, to be Surgeon, vice Stephenson, who exchanges. 1st Regiment of Foot: Acting Assistant-Surgeon Robert M'Nab, M.D., to be Assistant-Surgeon vice Sinclair, who resigns. 29th Foot: Staff Assistant-Surgeon Robert M'Gregor, to be Assistant-Surgeon, vice Macbeth, appointed to the Staff. 55th Foot: Surgeon, George Alexander Stephenson, from the 3rd Dragoon Guards to be Surgeon, vice Mapleton, who exchanges. 61st Foot: Acting Assistant-Surgeon Herbert Taylor Reade to be Assistant-Surgeon, vice Clark, promoted in the 83rd Foot. 83rd Foot: Assistant-Surgeon Frederick Hobson Clarke, from the 61st Foot, to be Surgeon, vice Ledingham, deceased. Hospital Staff: Assistant-Surgeon Alexander Mackay Macbeth, from the 29th Foot, to be Assistant-Surgeon to the Forces, vice M'Gregor, appointed to the 29th Foot.

Royal Glamorganshire Light Infantry Battalion of Militia.—James Bird, Esq., to be Surgeon, vice Richard Reece, Esq., deceased.

Naval Appointments.—Assistant-Surgeon Alexander Brown, M.D., (1845,) from the Impregnable flag-ship, at Devonport, to the Bellerophon 78, at Devonport. Patrick Slevin (1841) to the Impregnable. Henry S. Edwards, (1849,) acting, is confirmed to the Retribution steam frigate. *Promotions*.—Assistant-surgeon W. R. E. Smart, (1841,) W. T. Gruggen, (1841,) and Ernest Elliot, (1841,) to be surgeons.

Obituary.—At Perth, on the 24th ult., Dr. William Gordon, late of Montego Bay, Jamaica, aged 42.

The Cholera broke out lately, with fearful violence, in Algeria. 130 deaths occurred in two days. It has since subsided as rapidly as it commenced.

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·952	52·5	48·7	+ 6·5	W.S.W.	S.W. & W.	Miles. 230	0·00	No electricity was shown during the week.
Monday	29·727	51·0	44·9	+ 4·9	S.W.	W.	250	0·19	
Tuesday.....	29·880	51·1	45·3	+ 4·8	S.W.	S.W.	240	0·00	
Wednesday.	29·975	50·8	45·1	+ 4·5	W.S.W.	W.	110	0·00	
Thursday ...	29·937	50·5	45·5	+ 4·2	S.W.	S.W.	245	0·00	
Friday	29 919	47·8	39·7	+ 1·6	S.W.	W.	150	0·00	
Saturday ...	30·194	47·9	42·4	+ 1·9	S.W.	S.W.	150	0·00	
Means ...	29·941	5·02	44·5	+ 4·1	S.W.		SUM 1·375	SUM 0·19	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

HEALTH OF LONDON DURING THE WEEK.

The increase of mortality, noticed in the previous week, is still apparent, to nearly the same extent, in the week ending last Saturday. The deaths registered in the metropolitan districts, which in the two preceding weeks were respectively 845 and 945, numbered last week 921. In the corresponding weeks of the ten years (1840-9) the average was 963, which if raised in the ratio of supposed increase of population, becomes 1051, and shows a difference in favour of last week to the amount of 130. The mortality from pneumonia (or inflammation of the lungs) and asthma nearly equals the

average, while that from bronchitis exceeds it; and though the deaths from all diseases are diminished, as compared with last week's return, those from that class of complaints, of which the above are the most important, have increased. For, in the preceding week, the deaths from diseases of the respiratory organs were 138, last week they were 171. But it will be seen that phthisis (or consumption), which has this year been less fatal than usual, is not included in this observation; for while in the previous week it was fatal in 112 cases, last week there were only 93, a considerably less number than in any of the ten corresponding weeks in 1840-9, when they ranged between 107 and 138. The present time seems to be unfavourable to the health of the aged, but more propitious to the young. Eleven children died of small-pox, besides a man who had nearly attained the age of 60; 22 of measles, 23 of hooping-cough, 33 of scarlatina, 7 of croup. Fever is now the epidemic which is most productive of fatal results; last week 55 persons, of whom about a half were of middle age, were its victims. Fatal cases of diarrhœa and dysentery do not exceed 20.

MORTALITY TABLE.

Deaths in the week ending Saturday, Nov. 9, 1850.

(Metropolis.)

Causes of Death.	Nov. 9. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	399	295	217	921	9623
Specified Causes	399	295	216	910	9566
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	143	49	14	206	2257
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	6	16	15	37	480
Tubercular Diseases	47	81	5	133	1648
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	38	36	27	101	1103
Diseases of the Heart and Blood-vessels	4	22	21	47	309
Diseases of the Lungs, and of the other Organs of Respiration	87	31	53	171	1633
Diseases of the Stomach, Liver, and other Organs of Digestion	19	27	12	58	611
Diseases of the Kidneys, &c.	1	8	2	11	76
Childbirth, Diseases of the Uterus, &c.	...	5	...	5	120
Rheumatism, Diseases of the Bones, Joints, &c.	2	3	3	8	77
Diseases of the Skin, Cellular Tissue, &c.	...	1	...	1	11
Malformations	3	...	...	3	19
Premature Birth and Debility	27	2	...	29	237
Atrophy	19	1	3	23	159
Age	...	...	55	55	509
Sudden	1	2	2	5	95
Violence, Privation, Cold, and Intemperance	2	11	4	17	217
Causes not Specified	...	...	1	11	67

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Nov. 9, 1850.	Sum of Ten Weeks.
London...	1948369	921	9633
West	301189	111	1390
North	376568	205	1689
Central...	374199	146	1796
East	393067	214	2060
South	503346	245	2698

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	21	Heart	44	Phthisis.....	93
Bronchitis	70	Hooping-cough ...	23	Pneumonia	77
Cholera	1	Hydrocephalus ...	22	Scarlatina	33
Childbirth	3	Influenza	1	Small-pox	12
Convulsions	26	Liver	8	Stomach	9
Diarrhœa	16	Lungs.....	2	Teething	4
Dropsy	15	Measles	22	Typhus	55
Erysipelas	6	Paralysis	23	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	851	451	400
Females	726	470	256
Total.....	1577	921	656

TO CORRESPONDENTS.

The Homœopaths.—We cannot, this week, find room for Mr. Wilson's long letter; indeed, were we to consult the wishes of numerous correspondents, we would give no place in our columns to such *niaiseries*. Mr. Mackern, M.R.C.S., of Clapham Common, has also written to us, "In virtue of his position as a homœopathic practitioner." We will insert his letter with Mr. Wilson's.

Verax, of Lincoln.—Persons holding only the qualification of M.D., Aberdeen, are not entitled to practise as general practitioners in England. Our Correspondent will receive a reply to his second query on writing to the Secretary of the Society of Apothecaries.

Mr. Wardrop's Work, we regret to say, in answer to several Correspondents, is still unfinished. About fifty pages are printed, but these, until we can complete the work, it would be scarcely worth while to distribute to our subscribers. We recommend our many Correspondents to apply to Mr. Wardrop on the subject.

A Reader of the "Medical Times," Liverpool.—St Andrew's, by all means. Apply to Professor Day.

Mr. Ward's Introductory Lecture.—Several Correspondents have requested us to publish this most excellent introductory lecture, delivered at the London Hospital. We would willingly have done so, and, in fact, such was our intention; but the discourse having already appeared as a separate publication, and being obtainable at any booksellers, we regret we cannot break through an established rule, and reprint the work in our columns.

Antidote for Chloride of Zinc.

[To the Editor of the Medical Times.]

Sir,—In the "Medical Times" of the 13th July, 1850, are some remarks on a case of swallowing a quantity of a solution of chloride of zinc; and, in the Number for the 10th of August, page 145, are some observations on what may be the proper antidote for this substance. I believe the first recorded case where a large quantity of a solution of chloride of zinc was swallowed (in mistake), was one treated 4th May, 1848, by Dr. Stratton, and published in the "Edinburgh Medical and Surgical Journal" for October, 1848. As Dr. Stratton shows, the antidote for chloride of zinc is either carbonate of soda, or carbonate of potash; on emergency in a private house, soap may be used instead. His patient, a male adult, was so treated, and recovered.

A Constant Reader.

[To the Editor of the Medical Times.]

Sir,—In the "Lancet" of October the 12th, there is an account of a new tourniquet, said to be invented by Mr. Skey. I would, through your columns, beg to refer that gentleman, as well as the Editor of the "Lancet," to the 21st Volume of the "Dublin Medical Press," page 309, where there is an account of a new instrument for the treatment of aneurism, invented by Dr. Carter. The resemblance between these instruments is wondrous. Sir B. Brodie, when in Ireland last August, was presented by the Irish College with a set of Dr. Carter's instruments; coupling this with the strong resemblance of these two, I can only say it is a strange coincidence.

I am, Sir, your obedient servant,

A. B.

[To the Editor of the Medical Times.]

Sir,—I have just heard that a very wealthy clergyman, a neighbour of mine, has gone to Blackheath to be treated by some Swedish or German Doctor, who is there practising some new plan of treatment of chronic (frequently imaginary) diseases peculiar to sedentary persons. I have been informed, too, that the said treatment consists, in part, of some mysterious method of manipulations, differing, of course, from the well-known shampooing manipulations. Now, as I cannot summon the assurance to approach the worthy Divine for particulars, I take the liberty of applying to you for information, and I have no doubt that a paragraph in the "Medical Times" next week, with your strictures on the plan, if it deserves such notice, will be gratefully received by others as well as by

Yours very truly,

November 8, 1850. T. B.

An Irish M.D. had better apply to Dr. Waller, of Finsbury-square.

A. B., Bradford.—We regret that any delay has taken place respecting the notice of the Annual Meeting of the West Riding Medical Charitable Society. If our correspondent would furnish us with some further accounts of so useful an Institution, we shall gladly give them a place in our Journal.

The crowded state of our columns prevents us this week replying to numerous other Correspondents, and acknowledging the receipt of many communications and published works.

London Hospital.—Within the past month, 162 cases of serious accidents were admitted as in-patients; and 562 minor cases of accidents attended to. In other cases there had been 159 in and 758 out-patients; making together 1658 cases. Since the 1st of January in the present year, 17,064 poor persons have been attended to. During last year the numbers were 20,906.

ORIGINAL LECTURES.

CLINICAL LECTURE ON ERYSIPELAS,

AT

ST. BARTHOLOMEW'S HOSPITAL.

By GEORGE BURROWS, M.D., F.R.S.,
Physician to St. Bartholomew's Hospital.

There are two primary divisions of erysipelas, namely, idiopathic and traumatic; of the latter, resulting from wounds, operations, and other injuries, I have nothing to say; it is to the former, the idiopathic erysipelas, produced by vicissitudes of the atmosphere, or, as some say, by infection also, that my remarks will apply.

Idiopathic erysipelas may affect the proper tissues of the skin alone, or it may implicate the subcutaneous cellular tissue also. When the skin alone is attacked, when the disease is superficial, it most commonly appears first about the face, head, and throat; thence it rapidly spreads to other parts of the surface, and often extends inwards through the nostrils, to the mucous membrane of the pharynx, larynx, and other parts of the respiratory tubes. This variety of erysipelas has been termed *erysipelas erraticum*, from its rapid and great extension, or *erysipelas œdematodes*, from the swelling of the integuments and disfigurement of the features which speedily ensue. It terminates by vesication or abundant scurfy desquamation of the cuticle. The constitutional disturbance by which it is accompanied is fever, *adynamic* or *typhoid*. By the first epithet we mean prostration of the vascular and muscular powers; by the latter, fever attended with stupor and muttering delirium. When erysipelatous inflammation extends to the subcutaneous cellular tissue, it is termed *erysipelas phlegmonodes*, and occurs most frequently about the limbs, although it often appears also on the scalp. The local inflammation rapidly tends to suppuration and sloughing of the subcutaneous tissues, and the constitutional disturbance partakes more of the character of ordinary inflammatory fever. I consider these distinctions in reference to idiopathic erysipelas, with respect to the tissues implicated, to the termination of the local affections, and to the characters of the accompanying constitutional disturbance, of the utmost practical importance, because the plan of treatment, which is often recommended and adopted for erysipelas—namely, general and local vascular depletion, the application of cold to the affected surface, low diet—is, in my opinion, applicable only to one variety, viz., the erysipelas phlegmonodes; while the idiopathic erysipelas erraticum or œdematodes, according to my experience, requires the use of tonics, wine and other stimulants, warmth to the affected parts, nutritious diet, and a regulation of the alvine secretions by mercurial alteratives and laxatives. The class of cases to which I am about to call your attention are all examples of this latter kind, which is usually met with in the physician's wards. In the course of the last six weeks, you have had an opportunity of watching no less than eleven cases of more or less severe erysipelas, all occurring among the female patients in Faith ward. The attacks followed upon each other with such rapidity, and with such serious effects upon persons already inmates of the ward, that, under apprehension, though not conviction, that the disease was spreading by infection, I was compelled to request the authorities to close the ward temporarily, and have it thoroughly purified.

Case 1.—The first case which occurred was that of Susannah Hyde, aged 36, admitted into Faith back ward on March 7th. Her symptoms on admission were as follow:—The whole face much swollen and disfigured; the skin of the forehead, eyelids, cheeks, and upper lip very red; the eyelids œdematous, completely closing the left eye, and nearly the right also; the nose and cheeks were studded with numerous vesicles; the skin of the body hot and dry; the pulse 130, soft; tongue dry and brown, nearly clean; deglutition difficult; bowels open. Her intelligence seemed perfect, and her memory of the progress of her illness good. She stated that a month since, her husband was admitted into this hospital with erysipelas of the face, and was discharged cured two days ago; she frequently visited him during his illness, and about six days ago she felt chilliness followed by heat; two days afterwards her face began to feel hot, and her throat sore and on the following day the redness appeared on her cheeks.

This case presented a very perfect specimen of idiopathic erysipelas, and of that variety which is termed "erratieum," or "œdematodes." The only symptom wanting on admission to complete the usual catalogue, was disturbance of the intellect; but drowsiness and slight delirium soon supervened. Simultaneously with the cutaneous affection, there was in this case the very common complication of affection of the mucous membrane of the pharynx. The complaint occurred under circumstances which strongly favoured the supposition that she was infected by her husband, although it was also probable that the same unfavourable hygienic conditions which had developed the disease in the husband had also acted deleteriously upon herself.

The treatment adopted was that which you almost invariably observe to be prescribed in such cases in my wards, and I believe with considerable success. I make this remark, because in some systematic works frequently consulted by students, another plan, namely, the so-called antiphlogistic, is strongly recommended, and that which I follow is only incidentally mentioned. She was ordered a constant poppy fomentation of the face, and to take the sesquicarb. of ammonia, gr. v.; cum tinct. cardam. c., ʒss.; ex m. camphor, 4tis horis. Her diet to consist of beef-tea, Oij.; wine, ʒvj., together with arrow-root and diluents daily. On the two following days the erysipelas extended; the throat became more sore, with tenderness on pressure about the larynx; she became drowsy during the day, and slightly delirious by night; the bowels did not act, and in other respects she remained the same. She was ordered hydrarg. chlor., gr. ij.; olei ricini, ʒss.; and emplast. canthar. superiori sterno. In other respects the treatment and diet remained as before, with wine ʒx. daily.

During the six succeeding days the erysipelas subsided on parts first attacked, and then spread slowly down the front and back of the neck, with some return of soreness of throat. The calomel and castor oil were repeated, and another blister applied to the chest. These remedies were followed by decided relief to her symptoms, and particularly she expressed her throat to be relieved by the action of the blister, so that she swallowed easily. On the ninth day from her admission, the cutaneous inflammation had subsided everywhere; the skin was warm and moist; pulse 114, soft; tongue clean and moist; bowels open; deglutition easy; cough and expectoration of some frothy mucus. The sesquicarb. of ammonia was discontinued; the wine and beef-tea were diminished to half the previous quantities, and she was ordered haust. ammon. acet. c. oxym. scillæ, ʒss.; sps. æthers. nitrici., ʒj. 6tis horis.

On the following day, in consequence of cough and expectoration, and the detection of an impairment of vesicular breathing, and some crepitation in the right lung, she was ordered a blister on that side. The bronchitic symptoms gradually subsided; and she appeared quite convalescent until a fortnight afterwards, while she was up, dressed, and moving about the ward, she complained of pain in the right side. A mustard poultice to the part was prescribed, but this gave but temporary relief, and, upon resorting to auscultation, we discovered impairment of vesicular breathing, bronchial sounds, and dulness on percussion throughout the lower two-thirds of the right lung.

These physical signs clearly indicated that the erysipelatous inflammation which had first appeared on the face had gradually spread to the fauces and larynx, thence to the bronchial tubes, and lastly had most insidiously affected the vesicular structure of the right lung. The symptoms I have detailed at the successive stages of the case marked the progress of the disease, and fully justified the epithet of erysipelas "erratieum." The consolidation of the lung rapidly yielded to the influence of moderate doses of the hydrarg. cum cretâ, a blister to the side, and diuretic salines. The woman left the hospital perfectly well on April 20th.

Case 2.—The second case I will call to your recollection was that of Mary Richardson, aged 18, who was admitted into the same ward (suffering from epileptic fits) on the day after the admission (March 8) of the former patient, and was only separated from her by the intervention of two other patients. Five days after the admission of Mary Richardson, she was seized during the night with shivering, pain in the left side of the head and face, which, when she arose in the morning, was swollen and tender, and she vomited after getting up

rom bed. These premonitory symptoms were soon followed by redness and œdema of the left side of the face, swelling and tenderness of the left parotid and cervical glands, soreness of throat, and difficulty of deglutition. During the ten succeeding days there was an intense erysipelatous inflammation of the whole face and head, and corresponding constitutional distress, which was treated upon precisely the same plan as the former case. The inflammation entirely disappeared; she obtained good sleep; her appetite returned, and she appeared convalescent; when, after an interval of four days, the erysipelatous inflammation of face re-appeared, and continued four days more. During this relapse we again returned to alterative doses of mercury, to the ammon. sesquicarb., to the poppy fomentations, and the same diet, with ʒiv. of wine daily. At the expiration of a week she was again convalescent, and progressed satisfactorily, without further drawback, excepting a slight attack of epilepsy, and she has since been discharged well. The case was not so severe as the former one, and not complicated with pulmonary inflammation, but presented several points of pathological interest, and to these we will now allude.

First, we remarked, that, during the three weeks' continuance of the erysipelas, there was an entire cessation of the epileptic fits; and, upon the subsidence of the former disease, the symptoms of her nervous disorder re-appeared in a milder form. A similar phenomenon was also observed in another case, to which I shall presently advert, where very severe epileptic fits subsided during an attack of erysipelas, and re-appeared in their pristine severity upon the disappearance of erysipelas.

Analogous phenomena occurred in a third case:—A young woman was admitted into the front ward of Faith with hysteria, and was at the same period seized with erysipelatous sore throat, which entirely dissipated all hysterical symptoms. This is not an uncommon event. I remember, a few years ago, when typhus was rife as an epidemic, a girl was admitted with the most aggravated form of chorea—the chorea saltatoria. She occasionally bounded across the ward like a kangaroo, and came alongside the bed of a patient in the worst form of typhus. The choreic girl became affected with typhus, and narrowly escaped with her life; but the chorea entirely disappeared during the fever, and did not re-appear subsequently.

Secondly, we remark, this girl, Mary Richardson, had a relapse of erysipelas while under treatment and before she had risen from her bed. I mention this circumstance to impress upon you the consideration, that exposure to certain states of atmosphere will excite this complaint, independent of exposure to infection.

Thirdly, it is a question of interest in reference to the etiology of erysipelas, whether the first attack of this girl, Richardson, as well as that of the woman Hyde (case 1) are to be attributed to infection or to exposure to cold and moisture. This girl, undoubtedly, was within reach of infection from the first patient; but, at the same time, it must be mentioned, that she occupied a bed immediately beneath a window which is generally open for the purpose of ventilation of the ward, and that, at the time she was attacked (March 13,) a bitter cold north-easterly wind was constantly blowing over her bed. That such an exposure is adequate to produce erysipelas, few will deny; and that such cause was in operation in this case, is rendered highly probable from another circumstance,—that no less than five female patients in the adjoining front division of Faith Ward, all occupying beds on the same side of the ward, and all more or less exposed to the current of north-easterly wind, were attacked in rapid succession with erysipelatous inflammation. In two the inflammation was confined to the surface, in one to the forehead and throat, and in the remaining two to the throat alone.

To these five other cases I will now call your attention.

Case 3.—Ann Neary, aged 21, was admitted into Faith front ward on March 18, suffering under a train of urgent symptoms, resulting from hypertrophy of the heart, with extensive chronic disease of both mitral and aortic valves. These cardiac lesions were the results of three previous attacks of rheumatic fever, which had occurred at the ages of 11, 13, and 15 years successively. Three years ago she had also been my patient in the same ward, suffering under the symptoms of intense cardiac distress and anæmia, and, after exciting great interest and alarm for her life, she was, after thirteen weeks' treatment in the hospital, so far restored to health that she was enabled to resume her occupation as a sempstress, until within a short period of this her third admission into the hospital. I mention these points in her history to make you aware how far her constitution was already damaged by the structural lesions of the most vital organ—the heart, and what claims we had upon the gratitude of her Irish relatives. On March 25, one week after her admission, and during the progress of the two already described cases of erysipelas, this young woman was attacked with shivering, vomiting, sleeplessness, loss of appetite, thirst, heat of skin, and sharp pain of the left breast, which soon became hot, red, and swollen; erysipelas became well developed, and gradually extended from the breast to the axilla neck, down the upper arm to the elbow, and to the left hypochondrium and loins. With this attack of erysipelas erraticum there was great exhaustion of the system, indicated by frequent feeble pulse, night perspirations, brown tongue, relaxed bowels, sleep disturbed by subsultus and slight wandering.

The swollen and exquisitely tender breast was temporarily relieved by two applications of a few leeches, followed by fomentations and poultices. The system was upheld by ammonia, wine, and such nutritious diet as she would take, and the nervous system and the irritable bowels were soothed by occasional doses of pulv. ipecac. comp., and the aromatic confection with tinct. opii.

In spite of the most assiduous attentions she sank on the eighth day of the attack of erysipelas, but no persuasion could induce her Irish friends to reward our care of their relative by permitting a *post-mortem* examination of the heart. The physical signs were so frequently ascertained and verified by different observers, that no doubt could be entertained of the extensive disorganisation of the cardiac structures, and it was to this lesion of a vital organ that the rapid sinking was due. The same result, from analogous causes, ensued in the next case.

Case 4.—Sarah Warrell, aged 15, admitted Jan. 31st into Faith Ward. She was a delicate girl, with all the usual symptoms and physical signs denoting advanced tubercular disease of the left lung. Her condition had slightly improved, up to the middle of March, under the influence of cod-liver oil and occasional blisters to the affected side of the chest, when she was attacked with well-marked symptoms of erysipelas erraticum, commencing on the face, and extending to the throat and chest. On the 1st of April she sank exhausted under the combined depressing influences of the serious structural lesion of the lung and of the erysipelas. Upon examination of the corpse, there were discovered the usual appearances of advanced tubercular disease in the left lung.

Case 5.—Mary A. Bailey was admitted into the same ward on March 7th, with epilepsy and amenorrhœa, and, while under treatment for these complaints, she was seized with sore throat and great depression of strength on March 15th. These symptoms were met by quinine and Port wine, and in the course of a few days erysipelas appeared in the eyelids and forehead. The erysipelatous blush was not continuous over the whole forehead, but in blotches and stripes, and these latter red lines appeared to follow the ordinary course of the frontal veins. The integuments in the course of these red lines were slightly elevated and hard, which state of parts led us to suspect that phlebitis had commenced. This erysipelatous inflammation of the face and throat continued from March 15th to April 6th, and during the whole time she was in a state of extreme debility, and almost constantly in a stupor, or else of extreme stupidity, so that it was difficult to ascertain from her what she really felt. When told to hold out her arm for the purpose of feeling her pulse, she held it in that position (as in catalepsy) long after the pulse had been felt, and until she was told to put it down again. During the continuance of this attack the epileptic symptoms entirely ceased for three weeks, but afterwards re-appeared, and remained until her discharge.

Case 6.—Marianne Kean, aged 22, was admitted into the same ward on Feb. 14, suffering from hysteria, and occupied the bed intermediate to those of the two last-mentioned patients. At precisely the same period as the last-described case, she was attacked with sore throat and great depression of strength, requiring the free administration of quinine, wine, &c. In this case no erysipelatous blush appeared on the surface, but it could hardly be doubted that the same baneful agent which had produced erysipelas of the face in some patients, in others a simultaneous inflammation of the face and throat, had in this case merely affected the fauces. The hysterical symptoms entirely disappeared during the

continuance of the erysipelatous sore throat, and did not re-appear, so that she was discharged convalescent on April 16th.

Case 7.—Mary Lutman, aged 60, was admitted with hemiplegia into the same ward (Faith), on March 11. She was an emaciated, delicate woman, who informed us that nine days previously she had dropped down whilst walking, without losing her consciousness, and was suddenly deprived of all power and nearly all sensation of the parts on the left side of the body. On March 16th she was attacked, simultaneously with other patients, (Cases 2, 5, and 6,) with sore throat, restlessness, delirium at night, and symptoms of great exhaustion, much increased by her inability to swallow. Cinchona, ammonia, port wine, nutritious diet, were immediately prescribed, but she rapidly lost ground. On the fourth day after this attack she had a severe rigor, followed by constant wandering; small, fluttering pulse; dry tongue; and some *soreness of the scalp*. On the sixth day (March 22) she sank, after a delirious night, and the corpse was examined six hours after death. In the brain was discovered an extravasated mass of brownish coagulated blood, about the size of a walnut, situate in the right thalamus opticus. The coats of the arteries at the base of the brain contained much yellow deposit. The condition of the pharynx was carefully examined; the extremity of the uvula had sloughed, and there were several dark sloughs about the tonsils, which were not much swollen; there was a small dark slough along the border of the right vocal cord of the larynx, and the edges of the mucous membrane around were red and elevated. Such were the most important lesions discovered in this fatal case of hemiplegia, followed by erysipelas of the throat. Had this case occurred separate from all the others, we might, as nosologists, have classed it as an example of the cynanche maligna; but considering that it occurred precisely at the same time as Cases 3 and 4, which were marked examples of erysipelas, and that these three patients (3, 4, and 7) occupied adjoining beds on the same side of the same ward, there can, I think, be little doubt but that the sore throat and tenderness of scalp were the local manifestations of the same morbid action which produced more palpable erysipelas in the neighbouring patients. Simultaneously with the cases already described, there occurred two others of a much slighter description, in the back ward of Faith, and both of them speedily recovered.

It was after this rapid succession of nine cases of erysipelas in the same ward, eight of which appeared in patients already inmates for other complaints, that I had the ward temporarily closed and thoroughly cleansed. Almost immediately after the ward was re-opened, there was admitted on April 19th, into the front ward (Faith), and placed in a bed contiguous to those where the fatal cases had occurred, Sophia Hoare, aged 24, labouring under a severe attack of erysipelas of the face; and four days afterwards, on April 23, there was admitted into the back division of the ward, Mary A. Pitt, aged 20, also affected with erysipelas of the face. Both of these cases progressed most satisfactorily; the former was discharged cured May 6, and the latter shortly afterwards. The admission of a case of erysipelas into each of these wards so shortly after the prevalence of the former epidemic, might by some be regarded as incautious, but was happily not followed by any unpleasant consequences. The disease did not spread to other patients, and both of those so admitted went through the complaint most favourably. This series of eleven cases not only throws light upon the etiology of erysipelas, but urges upon our attention the discouraging truth, of how little we really know respecting the causes and mode of propagation of many diseases. If we merely regarded the cases 1 and 2, we might hastily conclude that each was the result of infection, although circumstances to which I have already alluded would, if duly weighed, make us hesitate before we assumed this as proved. The cases 3, 4, 5, 6, 7, all occurring in rapid succession in patients in adjoining beds, might also at first sight warrant the same conclusion; but when we investigate the conditions of these five patients more closely, we find they all occupied beds on the same side of the ward, each bed between two windows, and all more or less exposed to extremely cold north-easterly winds blowing across their beds. While these five patients on one side of the ward were thus seriously affected, not one of the six patients on the opposite warmer side of the ward, nor any of the nurses who were constantly around the erysipelatous patients, suffered in the least degree. If the disease spread by infection, which I very much doubt, how was it that the influence of the poison was confined to one side of the ward, and that the most thoroughly ventilated part on account of the contiguity of the windows? Again, if the disease spread through the ward by infection in March, how was it that, upon the admission of two perfectly analogous cases into the same wards in April, no similar results ensued? I think we must, from the consideration of these facts, arrive at the conclusion, that all these cases in their various modifications arose from one and the same cause,—viz., atmospheric influence. The spring had been unusually cold, and the wind had been most piercing from the east and north-east. It appeared to be part of the *constitutio anni*, as the great Sydenham would have said, that erysipelas should prevail.

And now, in conclusion, I will add a few remarks on the mortality of erysipelas, and on the treatment of the different varieties of the disease, but more especially of the idiopathic erysipelas. Of the eleven cases of erysipelas to which I have adverted, three terminated fatally. This I should consider a large mortality if it had occurred in eleven sporadic cases, that is, in eleven cases admitted into the ward from out of doors, and at different dates. But here we had the disease occurring as an epidemic, and it only proved fatal in three persons already affected with diseases of vital organs, which alone were capable of placing their lives in immediate danger. The first fatal case was in the hemiplegic woman of feeble constitution and of sixty years of age, and in whose brain we discovered extensive extravasation. The second fatal case was in the person of the girl, Ann Neary, admitted in an almost dying condition from serious disorganisation of another vital organ—the heart. The third fatal case was that of Sarah Warrell, who had already been in the hospital for some weeks, with all the symptoms of advanced phthisis, and whose left lung was found extensively disorganised by tubercular infiltration and softening. The results therefore are more encouraging than they appear at first sight, inasmuch as none died of erysipelas independent of structural lesion of a vital organ.

Not one of these eleven cases was treated upon what may be termed the antiphlogistic plan, and I do not believe that such treatment would have been borne by more than one of the whole number; and in her case such treatment would have been admissible for only twenty-four hours. All the others were uniformly treated upon the plan I have already indicated and recommended, namely, a constant local fomentation with flannels wrung out of hot decoction of poppies, the occasional administration of a moderate dose of mercury, followed by a laxative, the free use of the sesquicarbonate of ammonia as soon as the tongue was becoming dry, and with the addition of wine and brandy in proportion to the frequency and failing power of the pulse, and a diet composed chiefly of beef-tea and arrowroot or sago; also blisters, where internal organs were oppressed. Upon the decline of the cutaneous inflammation and fever, the ammonia was combined with infusion of cascarilla, or the disulphate of quina was prescribed in frequent doses of two or three grains. Although such is the plan of treatment I recommend to your trial in cases of idiopathic erysipelas *erraticum* or *œdematodes* appearing about the face, throat, and upper parts of the body, and particularly when it occurs epidemically, yet I am quite sure that you will occasionally meet with a few sporadic cases of erysipelas *erraticum*, and with many cases of erysipelas phlegmonodes, and traumatic erysipelas, which will require both local and constitutional remedies, which are technically termed antiphlogistic.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.

By HAYNES WALTON, Esq.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XV.

Ectropium Continued.—The treatment required when the Ectropium is severe or aggravated—Transplantation of Skin—Dieffenbach's method of Transplantation—Means of preventing Ectropium by the proper treatment of abscesses at the edge of the orbit—Importance of operating early for Ectropium—Second class of cases of Ectropium, arising from disease of the lid itself—Ectropium arising from the purulent Ophthalmia.

Gentlemen,—In this lecture I continue with the subject of ectropium, the result of abscesses at the edge of the

orbit. I have described the milder form of the affection and its appropriate treatment; now I pass to the severer kind.

When the cicatrix is very extensive, that is to say when there has been considerable loss of soft parts, transposition of the skin cannot be effected to the extent that would be desirable, and transplantation must be resorted to; but as it is in itself an operation of considerable nicety, and requires a well-tutored hand, and its success is at all times uncertain through the chance of imperfect union, or entire want of union, it should not be undertaken experimentally, but only under the most favourable and promising circumstances.

After the cicatrix has been dissected out, (and it is better to remove it by symmetrical incisions,) all the adhesions freed, and the lid carried to its proper place, a flap of skin and cellular tissue, decidedly larger than the gap to be filled, is to be dissected off from the cheek on a level with the spot on which it is to be placed, leaving merely a strip of connexion on the side next the gap; then the flap is to be twisted round as in the manner of rhinoplastic operations, fitted to the place made to receive it, and retained by sutures and strips of plaister.

When there is sufficient adhesion, the twisted skin must be divided and made to lie flat; about the 10th or 12th day, will generally be sufficiently soon.

The closer the approximation of the edges of the skin from which the flap has been taken, the less will be the size of the scar.

Some surgeons place on the cheek a bit of paper or leather, of the shape of the flap to be detached, as a guide for the incisions, just as is sometimes done in making a new nose. Others, again, map out the incisions with ink. I advise you to practise this operation on the dead subject, before you undertake it on the living.

Ectropium of the upper lid is exceedingly rare. I have no personal knowledge of any surgical operation for it. Judging from the difference in the conformation and arrangement of the upper and lower lids, and their relations to the orbit, I suspect it does not admit of the same amount of relief. In the cases that I have seen, the margin of the lid has been drawn under the edge of the orbit. The principle of treatment by operation can only be just the same as those described for ectropium of the lower lid, although the manner of operating may sometimes be varied. Dr. Jones has instituted an ingenious method that I will describe; it is one that I should follow, with a slight modification, did a proper case offer itself. I will give his own words, which tell of a case that he treated:—"Two converging incisions were made through the skin from over the angles of the eye, upwards to a point where they met somewhat more than an inch from the adherent ciliary margin of the lid. By pressing down the triangular flap thus made, and cutting all opposing bridles of cellular tissue, but without separating the flap from the adjacent parts, I was able to bring down the eyelid to its natural situation, by the mere stretching of the subjacent cellular tissue. A piece of the everted conjunctiva was snipped off; the edges of the gap left by the drawing down of the flap were now brought together by suture, and the eyelid was retained in its proper place by plaisters, compress, and bandage." My modification would be to detach the flap in the greater part of its extent. I would not trust to the pressing of it down, the result of which must always be uncertain. Dr. Jones admits, that the success of the operation depends very much on the looseness of the cellular tissue, and advises that for some days before the operation the skin should be moved up and down in order to render that tissue more yielding.

There is another operation, one of transplanting, which is equally ingenious as that just described, and applicable to either lid. The skin is not twisted, as in ordinary transplantation, but it is slipped laterally from its natural position to the part that requires it, a strip of attachment being preserved. It is Dieffenbach's blepharoplastic operation. I borrow the description from Dr. Mackenzie's book. "The cicatrix is to be extirpated in a triangular form, the edge of the eyelid to be preserved; should it have been lost, the remaining conjunctiva is to be detached and laid on the eyeball. An incision is then to be made from the temporal extremity of the basis of the triangle in the direction of the meatus auditorius externus, whether it be the upper or the lower lid that is to be supplied. From the temporal extremity of this incision, another is now to be carried upwards or downwards according to the lid to be supplied, and in either case parallel to the temporal edge of the triangular wound. The flap is now to be dissected from the subjacent parts, and drawn from without inwards, so that its inner edge is brought into contact with the inner edge of the triangular wound. These two edges are first to be steadied by a stitch at the inner canthus; then the tarsal edge of the flap and the conjunctiva are be brought together by five stitches; and, lastly, the inner edge of the flap is to be connected by Dieffenbach's suture (the common twisted suture) to the inner edge of the triangular wound. The temporal edge of the flap is not connected by sutures. The space left by the transposition of the flap is covered by lint and adhesive plaisters so applied as to serve to support the new lid in its place."

Great care should be taken in all dissections about the edges of the orbit to avoid cutting the supra and infra orbitar vessels and nerves at their exit from the bone.

Early and judicious treatment of abscesses that form at the margin of the orbit will prevent much deformity that would otherwise ensue. Pus should be evacuated by a free incision as soon as it can be detected; indeed, it should be sought for when its presence is merely suspected; and after an abscess has been opened sinuses should not be allowed to form.

The child of a noble family had a small abscess at the outer and lower edge of the orbit, and was attended by a surgeon of great distinction, who opened the abscess by a very small puncture; little relief followed, the lids remained swollen and the eye inflamed. The parents got dissatisfied, and when, in answer to their anxious inquiries, he told them that the bone was diseased, they became greatly terrified, and determined to consult some one who had given special attention to ophthalmic diseases. The physician in attendance requested that I might be consulted, and, accordingly, I was called in. I made a free incision through the swollen and boggy parts, which afforded a proper exit for the ill-formed pus; and I maintained the opening by the introduction of a strip of lint for a few days. The improvement was most marked, and in less than three weeks the child left town, with the abscess as nearly healed as possible; but a few granulations were to be cicatrized. I did not detect any bare bone, but I did not make any diligent search for it. I had no more reason to suspect that there was caries of the orbit than disease of those bones in other parts of the body over which abscesses were situated, of which there were seven; all of them I evacuated, and all healed rapidly. Of course I did not lose sight of constitutional treatment.

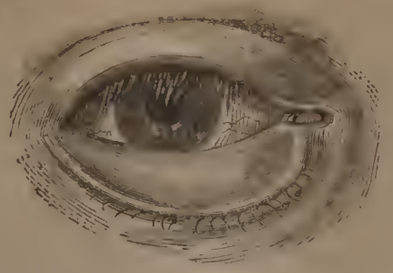
It is a pity to delay the operation for ectropium after the activity of the disease producing it has passed away. The longer it is postponed, the more permanent will be the bend or distortion of the tarsal cartilage.

On the treatment of ectropium arising from the other mechanical causes which were mentioned in the last lecture, bruises, wounds, &c., I need not dwell, because to do so would be to recapitulate what I have said. The same principles are applicable to that entire class. As in the cases arising from abscesses, much can be done to avert or lessen deformity, and especially in wounds, the accurate adjustment and the rapid union of which are most important.

Now, of the second class of cases of ectropium, those which are the consequence of disease of the lid itself, whereby some part of its structure has been primarily affected, I may say, that it is almost confined to the lower lid, and that it almost always arises from strumous inflammation of the eye. The conjunctiva is first affected, and afterwards the Meibomian apparatus is involved, and more or less permanently injured by the obliteration of the glandular apertures at the edge of the lid, and the destruction of the cilia. There appears generally to be an actual loss of substance of the cartilage from its edge, with a shrinking of all that remains. The bright red of the conjunctiva, with its thickened and puffy state, is the result of the constant exposure of it. I doubt whether this chronic form of ectropium is ever caused by a thickened state of the conjunctiva, independently of disease in other parts of the lid, for the lid is never suddenly everted as a whole, but by degrees, and only as much conjunctiva as is exposed is thickened; it becomes thick by exposure.

The drawing is a representation of such an everted lid.

The cilia have been introduced by the artist; they did not exist in the original:—



I understand that this form of ectropium is not uncommon in tropical climates, especially in the West Indies, and is confined to the Creoles and the resident Europeans. These cases arise from constitutional causes, and require general treatment, not of a depleting kind, but just the reverse, and the application of astringents. I am firmly impressed with a belief that all irritating substances are injurious. A change of climate produces a wonderful improvement when the disease is caused by a tropical residence.

But surgical treatment may sometimes be beneficially resorted to after the constitutional has done its utmost; that usually employed is the application of escharotics, (sulphate of copper, nitrate of silver, and even strong acids,) to produce contraction of the conjunctiva, whereby the lid shall be drawn in, and the excision of a portion of the conjunctiva for the same purpose. The amount of benefit to be derived must depend on the degree of perfection of the lid; if its cartilage be not injured, but merely turned down, doubtless the improvement would be considerable; and a second operation, that of cutting out a wedge-shaped portion of the lid, after the manner already described, might be available for further improvement; but cases of that nature are rare. When the lid has been partially destroyed, the removal of a portion of the conjunctiva by the knife (I never use escharotics for the purpose) does afford benefit, but deformity still remains, and sometimes, too, the inconvenience of the falling of the tears over the cheek. The removal of a bit of the cartilage is not applicable here; there is already a deficiency of cartilage.

In the purulent ophthalmia the conjunctiva may become greatly swollen, and turn the lid outwards; when the conjunctiva only is at fault, it begins to return to its natural state when the severity of the disease is subdued, and the lids regain their wonted position; when it does not reduce, it should be scarified freely. I am averse to cutting off any of it, for the contraction that follows excision may produce entropium.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

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(Continued from page 453.)

FOURTEENTH PAPER.

Duration.—When treating of the duration of typhus fever, I stated that, with reference to acute specific diseases attended by an eruption on the skin, "so long as the eruption continues, the disease of which it is the diagnostic character, exists." This is as true of typhoid fever as of the other diseases of the class; but then the eruption in typhoid fever may be absent, and when present it is often fugitive. In determining the duration of this affection, then, I have considered it essential to answer the following questions:—

1st. What is the latest period of the disease at which fresh rose spots make their appearance?

2nd. What is the latest period of the disease at which a patient may die, and yet no local lesion of sufficient importance to account for death be found?

3rd. What is the earliest period at which commencing reparation of that lesion which is the anatomical character of the disease, has been observed?

In answer to the first question, I may observe, that I have never seen (excepting in case of a relapse) fresh spots make their appearance after the 30th day of disease. Louis states, (Vol. II. page 97, of his great work on typhoid fever,) that in *one* case he observed rose spots for the first time on the 35th day of disease; but, on turning to the case to which this statement applies, *i.e.*, the 14th, it would appear that some error has crept into his calculations, for the subject of that case was admitted into the hospital on the 14th of April. On admission, he stated that he had been ill one week, but on inquiry he was proved to have suffered, more or less, for a fortnight; so that his illness commenced really on the 1st of April. Louis observed rose spots on the 1st of May, *i.e.*, at the latest, on the 31st day of disease.

In answer to the second question, my own researches have not made me acquainted with a case fatal after the 30th day in which a lesion of sufficient magnitude to account for death was not detected. Louis details nine cases fatal after the 30th day of the disease. The following is a summary of the structural changes in those nine cases.

In the 1st case.—Suppuration of the mesenteric glands; evidence of extensive inflammation of the general mucous membrane of the small and larger intestines. Extensive ulceration of Peyer's patches.

In the 2nd case.—Disseminated abscesses in the lungs. Collections of purulent-looking fluid in the pelves of the kidneys; parotid abscess.

In the 3rd case.—Extensive destruction of the tissues of the left lower extremity from erisypelas. Evidence of recent pleuro-pneumonia.

In the 4th case.—Extensive cervical abscess. Multiple abscesses in the liver. Lymph on and beneath the arachnoid.

In the 5th case.—Extensive solidification of the lungs.

In the 6th case.—Erysipelas of the left leg. Jaundice; and non-granular consolidation of the lung.

In the 7th case.—Diphtheritic inflammation of the fauces. Lobar granular consolidation of the inferior lobe of the right lung.

In the 8th case.—Perforation of the ileum, and evidence of recent peritonitis.

In the 9th case.—Perforation of the ileum, and evidence of recent peritonitis.

With reference to the third question, I have never seen marked attempts at reparation of the ulcers in the ileum before the 30th day. Chomel, in his *Leçons Clinique Medicale*, refers to nineteen cases fatal before the 30th day in which Peyer's patches were ulcerated. In one only of those nineteen cases was there any attempt at reparation of the loss of substance caused by the ulceration. He refers to two cases fatal on the 30th day; in one of the two there was commencing cicatrization; and to fifteen cases fatal *after* the 30th day, in twelve of these fifteen the ulcers in the intestine had commenced to cicatrize.

These facts, viz., 1st, that, unless in case of relapse, fresh rose spots do not appear after the 30th day; 2ndly, that if death occurs after that date, organic lesion sufficient to account for death always exists; and 3rdly, that any attempt at reparation of the intestinal ulcerations is, to say the least,(a) of very infrequent occurrence before the 30th day, while, in a large proportion of the cases cut off by intercurrent local disease after the 30th day, the intestinal ulcers are found partially or completely cicatrized;—these three facts, I say, tend to fix the duration of typhoid fever at about 30 days. That in many mild cases it terminates much earlier little doubt can be entertained, but at the same time the patient ought never to be considered convalescent till after the termination of the fourth week of disease. Let the reader just reflect that if it were not for the presence of the characteristic pustule many persons labouring under small-pox might consider themselves well after the primary febrile disturbance had run its course. A scanty eruption of small-pox pustules appears, and then, but for its presence, the patients would consider themselves in health. The follow-

(a) "To say the least," it must be borne in mind that it is often very difficult to fix the exact date of illness in typhoid fever.

ing case illustrates the fact that all the general symptoms may disappear, and yet typhoid fever be far from its termination.

Case 39.—In a man aged 40 years—headache—pains in limbs—rigors—nausea—diarrhœa—violent delirium—loss of sleep—followed by somnolence—eruption of rose spots—absence of delirium—moist slightly-furred tongue—enlarged spleen—watery stools—reduplicate pulse, varying in frequency from 72 to 96—marked emaciation—restoration to health during the fourth week.

Thomas T., aged 40, a labourer of temperate habits, ten years resident in London, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Tuesday, November 28, 1848. He was a tall, thin man, with a dark skin. He appeared to have been taken ill about a week before he came under observation. During that week he had suffered from headache, pains in the limbs, rigors, nausea, and diarrhœa, the latter preceding the use of medicine. On Sunday, November 26th, he became delirious, and the whole of the day before his entrance into the hospital was very violent. On first entering the ward he was with difficulty undressed and put to bed.

He was seen by me on the 29th of November. The nurse then stated that he had slept from 7 a.m. till 8 a.m., but, with the exception of that one hour, had not closed his eyes since his admission. During the night he was very delirious, getting out of bed every few minutes. At the time of my visit, 2 p.m., his mind was wandering, and he was unable to answer a single question rationally. He said he had no headache; his head was cool, his face pale; there was no heaviness of expression; no abnormal injection of the conjunctivæ; his pupils were rather small and equal. He was able to leave his bed unassisted with facility; muscular movements were performed without tremor.

The tongue was rather dry, but nearly clean; he had passed two watery stools during the preceding twenty-four hours; there was no abnormal fulness nor resonance of the abdomen, no tenderness nor gurgling, no vomiting; his pulse was only 72, but rather weak; no cough; the heart's sounds and impulse, as well as the breath sound, were natural; the skin was cool and dry; three imperfectly marked rose spots were observed on the back, chest, and abdomen, *i. e.*, one on each.

Soon after I left the ward he fell asleep, and continued dozing, with little intermission, till the following morning. When I then saw him, the delirium had entirely disappeared; his mind seemed in all respects normal; he had passed no stool; about twelve rose spots had appeared on the abdomen. On the 1st of December, about twenty fresh rose spots showed themselves on the abdomen and thorax, and as many as forty on the back; he had passed two watery stools. There was no delirium, but he thought that he had been in the hospital a fortnight, and that three days had elapsed since he saw me last, instead of, as was really the case, twenty-four hours. His pulse, which on the 30th was 84 and reduplicate—a character it retained so long as he was under observation—rose on the 1st to 96. On the 2nd, the rose spots noted on the 30th were much paler, and from thirty to forty fresh had made their appearance; his tongue was moist and rather white; he had passed three watery stools; his appetite was returning; the splenic dulness was extensive; he had slept well, and was perfectly rational; he remembered having seen me on the previous day. On the 4th, I noted that some of the rose spots marked on the 1st had disappeared; that the others were paler. On the 6th he passed four watery stools. On the 7th December I wrote as follows:—

"Pulse 96; he sits up in bed unassisted with facility; skin warm; cheeks slightly flushed; tongue moist, somewhat tremulous; no stools. Of the rose spots previously marked, two or three only remain; many fresh have appeared."

On the 8th, his pulse had fallen to 78; but on the 9th Dec. it had risen again to 96; two or three fresh rose spots were observed, and he passed two watery stools; he had four similar stools on the 10th.

No note was made after 11th December, when his pulse was 96; his appetite good; his bowels had acted once only for twenty-four hours. At the same time I observed that he appeared to have emaciated considerably since his admission. In ten days or a fortnight he left the hospital well.

As I have previously remarked, it is by no means uncommon in small-pox for the severe general symptoms—delirium, &c.—to cease suddenly on the eruption appearing. How far the consentaneous cessation of the delirium and appearance of the eruption in Thomas T. was more than a coincidence, may be doubted. I am disposed, however, myself to regard it as something more.

The reader will remember that a similar fact, *i.e.*, the consentaneous appearance of rose spots and cessation of violent delirium was observed in a previous case. Had it not been for the daily eruption of fresh rose spots, Thomas T. might have been considered convalescent on the 2nd of December. The specific disease did not cease, however, for at least a week after that date. If the reader will refer to the case of James S. (case 29) he will observe that that man might have been supposed to be convalescent at the early part of the second week, if reference had been had to the condition of the cerebral functions, the tongue, the physical abdominal signs, or the pulse only—the latter was 72 on about the 8th day of disease; but the presence of rose spots made it certain that the disease had not terminated; and very soon the hæmorrhage from the bowels proved that, although the febrile symptoms, commonly so called, had ceased, yet the intestinal disease, like the skin eruption, continued to make progress. The disease, the fever properly so called, had not then run its course, although the pulse was only 72, and the mind, in all particulars, was in its normal state.

Case 40—In a man aged 17 years—gradual attack of illness—headache—pain in the limbs—diarrhœa—epistaxis—disturbed sleep—partial loss of memory—loss of strength—dry red tongue—rose spots—convalescence during the fourth week.

Edward N., aged 17, a footman,—a slim lad, with dark brown hair and eyes, was admitted into the London Fever Hospital, July 17th, 1850. After ailing for some time, the duration of which was not clearly ascertained, he was taken suddenly worse Friday, July 12th, with increase of headache, which had previously existed, pains in the limbs and bowels, diarrhœa, and epistaxis; the latter was repeated before the lad's admission.

The day after his admission I made the following notes:—

July 18th.—Slight headache; slept but little last night; no delirium; memory defective; cannot tell how long he has been in the hospital; expression inanimate; no flushing of face; special senses unaffected; conjunctivæ pale; pupils natural. Although unable to walk alone, he can reach the close-stool unassisted.

Tongue large, moist and red at the edges, rather dry in centre, clean. Bowels much relaxed; ten stools before 10 a.m. Abdomen resonant, not particularly full; gurgling in right iliac fossa; no tenderness.

Pulse 96, full and of moderate power; no cough; no abnormal physical chest signs.

Skin hot and dry. From twenty to thirty rose spots scattered over the abdomen and thorax.

The diarrhœa and a dry red tongue continued the prominent symptoms till the 23rd, when his pulse suddenly fell to 72, and he passed only two stools. Rose spots appeared daily. The pulse never after that date exceeded 70. On the 26th his appetite returned, and I noted as follows on the 27th:—"Pulse 70, soft; expression good; no flush; tongue moist and clean; appetite good; one stool partially formed; sleeps well. The man is most anxious to be allowed to get up." But fresh rose spots continued to appear till the 31st. In about ten days he left the hospital.

Like James S., Case 29, and Thomas T., the subject of the preceding case (39), Edward N. might, had no reference been had to the rose spots, have been considered convalescent some days before the fever, the general disease, and probably also before the specific intestinal lesion had run their course. The recumbent position, *i. e.*, absolute repose in bed, was strictly enforced till all trace of the rose spots had disappeared. This is a practical point of essential consequence to the welfare of the patient; let him leave his bed before the rose spots have vanished, and the chance of severe symptoms coming on is considerable. Many such cases are put down as examples of relapse. The patient is supposed to be convalescent, gets up, commits some trifling error in diet, exposes himself to some injurious external influence; or, it may be without either, grave symptoms suddenly appear, and he is said to suffer relapse, whereas in reality the disease had not terminated when the patient was allowed to leave his bed. In fever, to regulate the diet, the temperature and ventilation of the room, the time when the patient shall leave his bed, &c., is often of more moment for

the sick man's safety than is the prescribing of drugs. For, let us remember, in no other sense—in a large majority of cases at least—than that in which we say a surgeon cures a fracture can we say a physician cures a fever. The latter, like the former, places his patient in favourable circumstances, and trusts nature to conduct the healing process. Meddlesome medicine is as bad as meddlesome surgery. The surgeon who fixes a limb, the subject of compound fracture immoveably, covers the wound with a pledget of lint dipped in the fluid nature has supplied, removes every source of irritation, whether within or without, and only interferes further, nature failing, all will allow, is as scientific a practitioner, and as valuable to his patient as the surgeon who, for the purpose of promoting concoction, granulation, or corroboration, handles, probes, and dresses; washes, greases, and powders the wound with tender care, morning, noon, and night.

If the surgeon who places his patient in favourable circumstances for nature to effect a cure is termed a scientific surgeon, while he who is ever interfering is denounced, and justly so, as unscientific, why should the physician dream that he is doing nothing, when, by enjoining or enforcing abstinence, mental quiet, bodily repose, fresh air, and cleanliness, he has placed the patient in circumstances in which nature may effect a cure? or he alone be regarded as scientific who, by the thousand drugs that flesh of the present day is heir to, unloads the liver, empties the bowels, promotes expectoration, excites sweating, induces sleep,—who lowers the action of the heart by blood letting, and produces counter-irritation by the application of cantharides,—who, if he does not handle probe and dress, certainly washes, greases, and powders his patient, and that, unfortunately, inside as well as outside?

A mild case of fever, like a simple fracture, requires neither bloodletting nor wine, neither the internal administration nor the external application of lotion or liniment, pill, powder, mixture, or ointment.

Case 41.—In a man aged 21 years—rigors—chilliness—loss of strength—vertigo—rose spots—anorexia—diarrhœa—extreme tenderness of abdomen—dry brown tongue—delirium—return of appetite—marked emaciation—signs of pleuro-pneumonia—sloughing of skin over sacrum—recovery, with contraction of right side of chest, 84 days after outset of illness.

George T., aged 21, a fair, thin man, a ploughman, was admitted into the London Fever Hospital January 23rd, 1849, under the care of Dr. Tweedie. He had always enjoyed health before his present illness; had never lived in London; was at Wandsworth when he fell sick, and had resided there a year. While working in the fields, on Saturday afternoon, Jan. 13th, a heavy rain fell; his clothes were wet through. About two hours after, *i. e.*, at 4 p.m., he was seized with severe rigors, accompanied by sense of cold. No further trustworthy history could be obtained.

I saw him for the first time on Thursday, Jan. 25th, *i. e.*, the 13th day of illness, and then made the following notes:—

The nurse reports that he slept the greater part of the night, and for some hours to-day. He himself affirms that he has had no sleep. No delirium; memory defective; thinks he has been in the hospital four days; complexion clear; cheeks slightly flushed; expression listless; nose rather red, slightly swollen, shining; vertigo in erect position; no headache; says he has "terrible nasty smell and taste, the worst he ever had in his life." Other special senses normal. He feels very weak, and is unable to leave or sit up in bed without considerable assistance. He lies constantly on his back.

Lips dry; tongue large, pale, moist, centre covered with thick brown fur. No stools the last twenty-four hours; two pale watery stools yesterday; abdomen full, tubshaped, resonant, generally tender; no appetite; no thirst.

Pulse 120, weak; heart's impulse normal; heart sounds natural; no cough; a little sonorous râle heard on deep inspiration.

Skin rather hot and dry; about four rose spots on the abdomen and thorax, and six on the back. No miliary vesicles.

On the 15th day of disease, the 6th of his residence in the hospital, he thought a fortnight had elapsed since his admission. He still slept well, but fancied he had not closed his eyes. His pulse had risen to 132; the respiration was only 18. His tongue was dry, glazed, slightly furred, fissured; red at the top; it was not particularly small; the stools were watery in consistence; some of the rose spots noted on the 13th day had disappeared; the others were paler; about a dozen fresh rose spots had appeared; the cheeks flushed occasionally. Rose spots were observed on the back on the 20th day.

On the 17th day, his pulse had fallen to 120; it continued at that rate till the 22nd day, when it fell to 103. Although he slept well all this time, yet he continued to fancy that he never closed his eyes. There was no actual delirium till the 21st day of disease; he then supposed strange people were around his bed. On the 18th day he passed two solid stools; on the 19th the bowels were confined; on the 20th and 21st two relaxed stools; on the 22nd day the bowels were again confined. During the whole of this time his abdomen was decidedly tender, especially the right iliac fossa, and he frequently complained of pain in the belly. He complained of want of food on the 14th day.

On the 25th day the pulse had again risen to 120, and was very weak; the respiration was 30. He had a troublesome cough, and submucous râle was heard at the base of the right lung anteriorly and posteriorly; some friction sound accompanied inspiration and expiration at the base of the right lung posteriorly; he had passed four watery stools; the tongue was moist, white, and slightly tremulous; the abdomen so tender that he shrank before it was touched. It was very resonant, and preserved the tubshape noticed on his admission.

On the 27th large liquid crepitation was heard at the base of the right lung; subcrepitant râle was heard as high as a level of the third rib; there was want of resonance at the inferior part of the lung. On the 31st day the physical signs of pleuro-pneumonia were much more extensive, there was absolute dulness as high as the fourth rib anteriorly, friction sound for some little distance above the dull portion. At this time his hands were livid, he lay constantly on his back, and never moved, even in bed, without aid. He had passed two or three stools into the bed during the preceding twenty-four hours. On the 14th of February, *i. e.*, the 34th day of disease, his pulse was 152 and very weak; his respiration 20, and somewhat irregular in depth and frequency. He had slept little the preceding night, was delirious when awake during the night, and occasionally during the day; cheek and nose livid; muco-purulent-looking matter collects at the canthi of eyes; abundant large liquid crepitation as high as the third rib anteriorly on right side. On the 36th day his pulse was from 150 to 160, small and weak; respirations 34; his hands and feet cold and livid; he had no idea where he was. A slough formed over the sacrum on the 40th day.

On the 45th day, the dulness of the right chest was much less decided; a little mucous râle anteriorly and posteriorly, and his expression of countenance was decidedly improved. On the 52nd day his pulse was 120, and he passed his stools and urine in bed. From this time he continued to improve daily. The man's appetite continued good from the 14th day, at times even was craving. He ate bread in his beef tea, rice-pudding, toasted bread, and one or more eggs daily, even when he lay on his back unable to turn, and passing his stools and urine in bed. Yet it was noted that emaciation proceeded daily, in spite of the food taken with evident relish.

Just before he left the hospital, on 82nd day of disease, I made the following note:—"There is still a little cough; the lower part of the right side looks much smaller than the corresponding part of the left side; the chest is compressed from before backwards, and not from side to side. Below the nipple the right *measures* one inch less than the left side, and the left side expands much more during inspiration than the right. The ribs, anteriorly and laterally, are closer to each other on the right than on the left side, from the extreme base of the right lung to just above the right nipple anteriorly, and to just above the inferior angle of the scapula posteriorly, there is no trace of respiratory murmur; a little obscure crackling and some coarse breath sound for a little distance above the nipple and about the centre of the scapula. At the apex of the right lung the breath sound is less full than on the left side. The vocal resonance and fremitus are decidedly less at the inferior part of the right than at corresponding part of left side."

The illness of Emma F., Case 34, was prolonged by the supervention of disease during convalescence. No one, seeing she was thrice convalescent, could have confounded

the length of her illness with the duration of the attack of typhoid fever for which she entered the hospital.

George T., the case last detailed, was ill 83 days. The typhoid fever terminated some time during the fourth week, but before it had run its course pleuro-pneumonia supervened. This local disease, so common a complication and sequela of typhoid fever, was of great extent and severity in the case of George T. On seeing him during the fifth and early part of the sixth week, with a pulse from 150 to 160 in the minute, and from its feebleness scarcely perceptible, hands and feet livid and cold, mind constantly wandering, stools in bed, urine retained, lower jaw incessantly moving tremulously, and then, added to these general symptoms, the lesions within the chest, revealed by their physical signs, no one could have anticipated the happy result. One favourable symptom alone remained throughout the illness—the patient's appetite was good. Even when lying in a state that death was to be expected every instant, he ate food ravenously, and throughout took what was given him with a relish. The large, loud, liquid râle heard within the chest, I now believe to have been an example of what Dr. Walshe has described as pleural rhonchus. On one occasion I was enabled to verify, by an examination after death, the fact, as stated briefly in his work on the Physical Diagnosis of Diseases of the Lungs, *i. e.*, that a large, liquid, superficial rhonchus may be heard in the chest, when, after death, the only physical lesions discoverable are a certain quantity of fluid amid loose adhesions between the pulmonary and costal pleuræ.

The cases of Thomas T., 39; James S., 29; and Edward N., (*i. e.*, 40,) *illustrates the fact*, that the typhoid fever may not have terminated, although the patient seems convalescent, and teach us to separate the apparent convalescence of the patient from the termination of the fever.

The case of Jane H., Case 33, *illustrates the fact*, that the intestinal disease may continue to progress long after the fever, properly so called, had terminated—simple ulceration succeeds to specific ulceration—and that, in this way, the illness may be prolonged for months after the fever has ceased.

The case of George T., Case 41, *illustrates the fact*, that a local inflammation, set up during the progress of the fever, may continue after the fever has run its course, and so the illness be prolonged indefinitely.

The case of Emma F., Case 34, *illustrates the fact*, that a true relapse may occur, and that affections of a nature different from the fever, as erysipelas, may supervene after the primary disease has ceased, for days or weeks, but before the patient has left the hospital or recruited his strength, and so an erroneous idea be formed of the duration of the fever.

All illustrate the importance of keeping the length of the illness and the duration of the fever distinct from each other, in estimating the effects of remedies, &c.

In my next, I commence the subject of relapsing fever.

ON THE PATHOLOGY OF THE UTERUS; ITS ANATOMY AND PHYSIOLOGY.

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When we consider the extent and importance of uterine pathology, involving as it does the well-being of the female during the greater part of her existence, no apology appears necessary for an inquiry in which it will be endeavoured to elucidate the symptoms and treatment of the diseases of the uterus by a reference to the anatomy and physiology of that organ.

As the development of this plan, however, necessarily involves both anatomical and physiological detail, previous to entering upon the pathology I shall consider the subjects under the following heads:—

1st. The anatomy of the organ, in connexion with which some points wherein a difference of opinion exists will be examined.

2nd. The physiology, in which the opinions as to the contractions of the uterus will be reviewed.

3rd. The pathology, wherein the application of the anatomy and physiology towards the elucidation of the symptoms and treatment of the diseases of this organ will be considered.

4th. The special pathology, which will be devoted to a succinct account of the symptoms and treatment of particular diseases.

Part I.—THE ANATOMY.

To enter into a detailed account of the anatomy of the uterus, would not only be uncalled for, but would occupy more space than can be devoted to it in this inquiry; hence I will only give a description of the distribution of the nerves, as a knowledge of this part of the anatomy is of essential importance in reference to the symptoms of the diseases. Afterwards it will be necessary to examine some points concerning which a difference of opinion has of late existed.

THE DISTRIBUTION OF THE NERVES OF THE UTERUS.

Before describing the distribution of the nerves of the uterus, vagina, and neighbouring organs, it is necessary briefly to recal the constitution of the sympathetic nervous system, as attention to this is essential to the full understanding of the subject.

The sympathetic nervous system is described as consisting of three parts:—1. The two gangliated cords which extend down each side of the vertebral column. 2. A series of plexuses in front of the vertebral column, as the cardiac plexus, the solar plexus, the aortic plexus, the hypogastric plexus, &c., from which branches are sent to the different viscera. 3. Small ganglia dispersed through the cranium, as the ophthalmic ganglia, the otic ganglia, the sphenomaxillary ganglia, the submaxillary ganglia, &c.

This system of nerves is also said to be connected with the spinal nerves by two roots—a white root and a grey root—and to be composed of an admixture of tubular nervous fibres and gelatinous nervous fibres. This description, however, gives a very imperfect idea of the constitution of the sympathetic nervous system.

Passing over the various opinions which have been expressed respecting this part of the anatomy, as being foreign to the present object, and as requiring too much space, I will sketch the structure of the sympathetic nervous system, as I believe it to be.

The nerves distributed over the body, to which the name sympathetic is applied, are composed of two kinds of nervous fibres very distinct from each other: the tubular nervous fibre, and the gelatinous nervous fibre. The tubular nervous fibre is derived from the brain and spinal cord, and, in whatever part of the body it is found, can always be traced to one of these organs. The gelatinous nervous fibre has its origin in the various ganglia of the sympathetic, whether these ganglia be situated at the sides of the vertibræ, on the posterior roots of the spinal nerves, in front of the vertibræ, dispersed through the cranium, or elsewhere situated in the body. The branches of nerves which have been called roots of the sympathetic system, are,

(a) The white branch, which is a branch from the spinal nerve. It is composed of two parts, one-half from the posterior, and the other half from the anterior root of the spinal nerve; then passes inwards to the sympathetic ganglia, and becomes associated with the gelatinous nervous fibre proceeding from it, and these are together distributed to the different viscera.

(b) The grey branch, which arises from the ganglion, soon subdivides, and is finally distributed to the parts in the neighbourhood. It is a branch of the usually-called sympathetic system.

Hence there are two distinct systems of nerves: the one formed by the gelatinous nervous fibre, which, together with the ganglia from which they arise, constitutes the true sympathetic system; the other, composed of the tubular nervous fibre, which, with the brain and spinal cord, forms the cerebro-spinal system. The gelatinous nervous fibre being chiefly distributed to the viscera, is found in greatest quantity near these organs; the tubular nervous fibre, being concerned in sensation and motion, exists in greatest amount in the skin, muscles, &c. These two systems, associated together in varying proportions in the middle part of their course, constitute the sympathetic system as it is generally described. Yet these two systems (although associated in the middle part of their course) are totally distinct from each other at their origin and at their termination. At their origin, where the tubular fibre arises separately from the brain and spinal cord, whilst the gelatinous fibre arises only

from the sympathetic ganglia. At their termination, where the tubular fibre separates from the gelatinous fibre, and each is separately distributed to the elements of the organ they are destined to supply. Minute microscopic nerves being found, which consist solely of the gelatinous nervous fibre.

The plexuses, then, in front of the vertebral column, and which furnish nerves to the various viscera, are composed of this association of the two systems of nerves, and to this class belong the aortic plexuses with their prolongation into the pelvis—the hypogastric plexus, the composition and distribution of which it is our special object to examine.

The superior aortic plexus, lying between the superior and inferior mesenteric arteries, is composed of an assemblage of ganglia, giving origin to the gelatinous fibre and branches of spinal nerves derived from the lumbar and lower dorsal nerves, with some communicating branches from the solar plexus. From this association of the two nervous fibres, or nervous systems, branches are sent along the inferior mesenteric and hæmorrhoidal arteries to the descending colon and rectum, and branches are prolonged downwards, to form the inferior aortic plexus, which, at the margin of the pelvis, separates into two divisions each of which receives the name of the hypogastric nerve or plexus. These plexuses pass round each side of the pelvis to reach the sides of the uterus; and there dividing and subdividing into minute branches, are finally distributed to the lower part of the organ. The middle part of the uterus is further supplied by a distinct branch which passes off from the upper part of the hypogastric plexus, and, entering the broad ligament, so reaches the organ; whilst the upper part of the uterus is supplied by branches which come from the renal plexus, and, in company with the spermatic artery, descends to the ovary, furnishes branches to it, and finally is distributed to the upper part of the uterus.

Thus the uterus is supplied, in the inferior and middle part, by branches of gelatinous fibre, the true sympathetic nervous system, derived from the ganglia of the superior aortic plexus and lumbar ganglia, with some communicating branches from the solar plexus; and branches of spinal nerves, cerebro-spinal nervous system, derived from the lumbar and lower dorsal nerves. Nerves derived from the same sources are also distributed to the descending colon and rectum. The upper part of the uterus being supplied by gelatinous nervous fibres, derived from the solar plexus, and by spinal nerves derived from the splanchnic nerves, which are branches of the upper dorsal nerves. From the solar plexus, *i.e.*, from gelatinous fibres from the semilunar ganglia and dorsal ganglia, and branches of the dorsal spinal nerves, branches are also distributed to the stomach, small intestines, liver, kidneys, &c.

As the hypogastric nerve on each side passes to the side of the uterus, it sends down branches from the lower border, which, joining with branches from the sacral nerves, forms a complicated plexus on the side of the vagina—the pelvic plexus. Small ganglia of the sympathetic are found in this plexus, but it is chiefly composed of the cerebro-spinal nerves; and in this it differs essentially from the hypogastric plexus. From the pelvic plexus comparatively large nerves are distributed to the vagina; and considerably sized nerves are sent to the bladder; whilst small branches are furnished to the lower part of the rectum.

The nervous supply of the vagina, bladder, and lower part of the rectum differs in these points from the nerves distributed to the uterus. (*a*) In the source from which they are derived: those to the uterus, arise from the lumbar nerves and gelatinous or sympathetic nerves coming from the superior aortic plexus and from the solar plexus; those to the vagina, bladder, and lower part of the rectum, take their origin from the sacral nerves, and the sympathetic fibres from the ganglia of the pelvic plexus, with some branches from the hypogastric plexus. (*b*) In the composition: those to the uterus being composed of a large amount of sympathetic fibres, and a small amount of cerebro-spinal fibres: those to the vagina, bladder, &c., by a large amount of cerebro-spinal fibre, and a smaller amount of sympathetic fibre.

The muscles and skin of the perinæum and lower end of the rectum are supplied entirely by branches from the sacral nerves—the pudic nerve. Thus, as we proceed upwards, from the skin and muscles of the perinæum to the vagina, and thence to the uterus, we meet with less and less of the cerebro-spinal system or tubular nervous fibre; and more and more of the sympathetic system, or the gelatinous nervous fibre. And, as a consequence, the effects of disease or injury to the tissues are less and less felt, as we pass from the skin to the uterus; and the actions of the organs are more and more, though not entirely, withdrawn from the influence of the will.(a)

Briefly, then, to recapitulate the anatomy of the nerves of the uterus, we find the following arrangement:—

1. The lower and middle portions of the uterus are supplied by the sympathetic from the superior aortic plexus and the lumbar ganglia, and by cerebro-spinal nerves from the branches of the lumbar and lower dorsal nerves.
2. The ovaries and upper part of the uterus are supplied by the sympathetic from the solar plexus and thoracic ganglia; and by spinal nerves, from the intercostal nerves, by means of the splanchnic nerves.
3. The vagina and bladder are supplied by branches from the sympathetic from the ganglia in the pelvic plexus, also from the superior aortic and lumbar ganglia, through the medium of the hypogastric plexus; and by spinal nerves from the branches of the sacral plexus.
4. The muscles, skin, &c., of the perinæum, are supplied by branches from the sacral plexus.

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[To be continued.]

(a) For a more detailed account of the anatomy of this part of the nervous system, see a Paper by the Author "On the Nerves of the Uterus," Phil. Trans., Part II. 1846.

(b) On Diseases of the Liver, Churchill, 1845.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

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FATAL JAUNDICE—DISORGANISATION OF LIVER.

THE following case is offered as a good illustration of that happily rare form of disease, in which intense jaundice, followed by delirium, coma, and other nervous symptoms, passes rapidly on to a fatal termination, and is found after death to be connected with extreme disorganisation of the substance of the liver. Several examples of this fearful form of jaundice have been recorded of late years, and a perusal of these, either in their original sources or in Dr. Budd's able work,(b) where they are collected together, will show how closely they resemble each other, and what an exact copy of their more prominent symptoms the following case presents:—

Jane Hardy, aged 19, admitted August 1, 1850, under Dr. Burrows, Faith, front ward 6. Stout, dark-complexioned, black hair; surface generally intensely jaundiced, conjunctivæ yellow; aspect dull, heavy; a sore, covered with a black scab, at one angle of the mouth; skin warm, moist; pulse 88, small, soft; tongue coated with a thin, white, rough fur; has thirst, nausea, and loss of appetite; bowels open, urine said to be very dark; abdomen full, probably naturally so, yet the fulness is most marked in the right hypochondrium and right side of the umbilical region, where there is also an unusual hardness not perceived on the opposite side. Pressure on the abdomen does not seem to cause much uneasiness: but the extreme torpor she is in will not admit of much information being gathered in this way. She makes scarcely any complaint, except that she is ill and drowsy.

At first there was considerable obscurity in regard to the history of the case, partly on account of the patient's torpor on admission, but principally, it seemed, from her disinclination to communicate anything respecting herself. It was subsequently ascertained, however, that she was a prostitute, and had latterly drunk large quantities of spirit, yet no one could say with certainty how long she had been ill, or in what way her illness had commenced. Three weeks previously she had presented herself at the hospital with jaun-

dice, which was stated to have been of about a fortnight's standing. Her condition at that time was not such as particularly to call for admission into the hospital, and of what occurred between this time and her subsequent application for relief, nothing satisfactory was learned.

She was ordered a warm bath, a dose of calomel and jalap, an effervescing saline draught, three times a day, and a pint of beef-tea.

Aug. 2.—She seemed to rest quietly in the night, but when visited in the morning was found drowsy, speechless, and apparently in a state of extreme exhaustion; she could scarcely swallow. Some brandy and water was administered and mustard plaisters applied to her legs. These measures seemed to rouse her, but she continued very drowsy during the day. When questioned, she answered readily and collectedly; but when left to herself she speedily fell into her previous drowsy condition, and occasionally talked incoherently. When told to show her tongue, she opened her mouth and kept it open, and it was with difficulty she could be induced to protrude the organ; it appeared coated with a brownish fur; skin cool; pulse 88, very small, soft. The pills operated freely on the bowels, the evacuations being copious, solid, of a pale slate colour, floating in dark-brown muddy urine. Abdomen more generally distended, and resonant on percussion. The crack at the angle of the mouth has been bleeding, and is now covered with a black scab. There is a very offensive smell about her, due apparently to a vaginal discharge.

A blister was applied to the right hypochondriac region. Two grains of calomel given directly, and a draught every four hours consisting of three grains of sesquicarbonate of ammonia and a drachm of the compound tincture of cardamomus in peppermint water; two ounces of brandy.

3rd.—Less drowsy; very sick, bringing up grass-green watery fluid which reddens litmus-paper; she retains her food, brandy, and medicine. The blister acted imperfectly, and she complains occasionally of pain in the abdomen. Tongue thickly coated with a moist brownish fur, tip and edges pale; skin warm, equally jaundiced; pulse 72, soft, more power; has passed another copious solid evacuation like yesterday's.

Ordered two grains of calomel and eight of colocynth at bed-time; to continue the draught.

4th.—The pills acted freely, producing two evacuations similar to the last. More drowsy than yesterday; jaundice more intense: the secretion at the inner canthus of each eye is of a bright yellow colour.

Ordered to continue the draught, and to have another blister applied to the region of the liver.

5th.—The blister drew well. Drowsiness continues; she is less sick; tongue more thickly coated, the fur being of a bright yellow colour.

To repeat the calomel and colocynth, and continue the draught, brandy, and beef-tea.

6th.—Restless in the night; continues dull and drowsy, yet answers readily. When told to protrude her tongue, she only opens her mouth; and, when further urged to show it, she puts her hand into her mouth as if to pull it out; it is thickly covered with a dirty yellowish moist fur. Breath very fetid. The sore at the side of the mouth has been bleeding again. No return of sickness. Bowels not acted. Pulse 88, rather full, soft. Complains of no pain, but is very thirsty; passes urine naturally.

The pills and draught to be repeated.

7th.—A very bad night, restless, and wandering; says she feels very weak and drowsy. Skin rather less yellow, but the face is more dingy and dusky. Abdomen full. Bowels have acted once. She takes and retains her food. The sore at the mouth bleeds whenever she is fed.

Ordered a senna draught immediately. To continue the ammonia draught and brandy.

8th.—Restless and lightheaded in the night, constantly getting out of bed. She is now more drowsy than ever, and can scarcely be roused; she lies with her eyes half open. Skin perspiring. Pulse 112, very soft. She has had two copious evacuations from the bowels, the last being a liquid bilious motion, very offensive. She takes freely all the nourishment offered to her. The skin is less jaundiced.

The strength of the ammonia draught was increased, and some tincture of senna added to it; the quantity of brandy was doubled.

9th.—She gradually became more comatose, but swallowed everything that was put into her mouth. She died at two this morning.

On examining the body, eleven hours after death, there was found universal jaundice of the surface and of the various tissues; there were also noticed several purpurous spots on the trunk and limbs; no emaciation; slight rigidity in lower limbs, none in upper; skull small, thick, and tough; dura mater thick, yellow; a little clear fluid in sac of arachnoid and cerebral ventricles, uncoloured; vessels of pia mater rather congested; brain softer than natural, especially towards the central parts, where it was quite pulpy—not much congested; spinal cord much softer than usual, otherwise natural; several purpurous spots on the pericardium and on the surface of the heart. The heart appeared healthy; no clots in its cavities. The blood, wherever examined, was quite fluid. The lungs were generally healthy. In the peritoneal cavity were several ounces of blood-stained fluid, while numerous purpurous blotches, or ecchymoses, existed in the several folds of the peritoneum. The loose tissue about the bladder, uterus, and rectum, and other parts of the pelvis, was largely infiltrated with dark blood, while the folds of small intestine contiguous to these parts were stained of a dark red colour. The liver was much smaller than natural, being scarcely visible on laying open the abdomen; the diminution was general, the thickness of the organ, as well as its general outline, being greatly diminished. Its tissue was singularly loose, soft, and flabby. The surface had a dirty brownish hue variegated by numerous patches of golden-yellow colour, which in several places were slightly elevated above the surface. On section, this admixture of colours was found to extend pretty equally through the whole substance of the gland. The yellow masses which were more abundant in the right than the left lobe were distinctly made up of the individual lobules of the gland, the outline of many of which was quite plain, while in the centre of each was a red dot or streak, indicative of the divided intra-lobular vein; in the brownish portions scarcely a trace of lobular arrangement could be discerned. Portions of the softened liver exhibited under the microscope numerous globules of oil, mostly free, but occasionally contained in hepatic cells. The hepatic cells themselves were few in number, much smaller than natural, some filled with fine colourless granules, others containing, together with these granules, globules of oil in greater or less abundance; while others, again, contained, both with and without granules and oil, little masses of yellow matter; several various-sized masses of yellow substance were scattered over the field. The gall-bladder was half filled with dark unhealthy-looking bile, and contained three small soft whitish calculi. The ducts were permeable and healthy; the common choledic duct was traced into the duodenum, and presented no appearance of having been recently distended by a calculus. Spleen large, rather dark and soft. A few ecchymosed spots along small intestine. The contents of every part of the intestinal canal were carefully searched for a calculus, but none was found. Kidneys large, very soft and flabby, and possessing a dark, muddy, half-decomposed appearance; some thick, yellow fluid in pelves; similar fluid in bladder. There was a cyst as big as a walnut in the right ovary.

Among the more striking features of this case, attention may for a moment be drawn to the fulness and hardness in and about the right hypochondrium, noticed on the day of admission. The diminution in the size of the liver, discovered after death, renders it unlikely that the fulness in question was directly due to this organ; for if, as is reasonably supposed, the disease is dependent on destruction or atrophy of the secreting structure of the gland, it is probable that, even at this first examination, the liver was under rather than over its natural size. It may, therefore, be inferred, that this fulness, which, judged of hastily, might have been mistaken for an enlarged liver, was, in reality, due to that partial contraction of the abdominal muscles over a suffering part, of which frequent examples are afforded in other affections of abdominal organs.

As just stated, the disease under consideration appears to consist in disorganization of the secreting substance of the liver, attended with destruction of the hepatic cells, and, consequently, with suppression of the secretion of bile. The jaundice, therefore, is due to retention of the elements of bile in the blood, and differs from that ensuing in consequence of obstruction of the biliary ducts, in the fact that, in the latter case, secretion takes place, but the

secreted fluid, prevented from being discharged, accumulates in the substance of the liver, and is then in part reabsorbed; while, in the disease under notice, the secretion is more or less completely arrested, in consequence, apparently, of the wasting or impaired action of the hepatic cells. Microscopic examination shows, that the number of cells in the diseased portions is greatly diminished, their place being occupied principally by oil, while those cells which remain seem, for the most part, imperfectly developed. The cells which remain are probably sufficient to effect some separation of bile from the blood; for, however intense the jaundice may be, some bile still passes into the intestine, as shown in the biliary vomiting noticed in the third day's report of the case just narrated, and in the bilious character of the evacuation voided from the bowels the day before the patient's death. The presence of bile in the gall-bladder, found after death, is also against the supposition that the suppression of the secretion is complete. The true pathology of the disease, or the cause which leads to the disorganization of the secreting structure of the gland, is, as remarked by Dr. Budd, confessedly obscure. The fluid state of the blood, together with the purpurous spots and larger extravasations noticed in various parts of the body in this and other parallel cases, are indicative of a poisoned condition of this fluid; but the mere retention of the elements of bile in it is probably in great measure the cause of the morbid state in which it is found. In several of the cases collected together by Dr. Budd, the disease occurred in persons who had led a dissipated, immoral life, and were addicted to drinking. A similar history occurs in the case I have narrated, and was noticed also in a closely parallel case which fell under my observation some years ago, occurring in a young woman who was taken to Bridewell for breaking windows; but, being found intensely jaundiced and violent, apparently from delirium, was at once removed to St. Bartholomew's Hospital, where she died the same night, and presented, on dissection, a liver in a state of disorganization similar to that just described. There seems, therefore, to be some close relation between this disease and the habits of the persons in whom it occurs; and it will be interesting, if future observation establishes this relation more certainly, and shows the disease to be induced by excessive intemperance, especially in the use of ardent spirits. As yet, there is no evidence of the kidney ever being the seat of an analogous disorganization of tissue and arrest of secretion, though it may be a question how far the soft, flaccid, unhealthy-looking kidneys occasionally met with, may depend on a corresponding destruction of their secreting tissue. W. S. K.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

FRACTURE OF THE NECK OF THE ASTRAGALUS.

A very interesting case, in a practical point of view, of this very rare injury, was brought into St. Thomas's on Monday, and operated on by Mr. Simon, just as he had completed an operation for strangulated hernia.

H. B., aged 30. The poor fellow's story seemed to be that he was occupied as a painter on a scaffold, when some one removed a ladder and precipitated him to the ground. His chief injury, on examination, proved a large open wound of the ankle joint, with dislocation of the bones of the leg—both fibula and tibia inwards, the fibula not broken, but impacted among the bones of the foot—with very evident fracture of the astragalus, this bone protruding and broken in pieces. Compound dislocation of the ankle-joint of this kind, it need scarcely be said, is a most serious accident, surrounded as it is with so many difficulties; in this case, indeed, the lesions seemed of no ordinary kind; the chief artery and nerve were destroyed, and, in addition to all the usual attendants of torn ligaments, &c., there was very evident smash of the calcis, perhaps, as well as astragalus; the grating of the pieces of these bones, as well as of the adjoining ones, portended very unfavourably for the case.

The astragalus, articulated above as it is with the tibia and fibula, below with the calcis, by a distinct capsular ligament, in front to the navicular, by another capsular, and the internal lateral ligament, one would expect it pretty safe from dislocation; yet dislocations sometimes do occur; fracture, however, is more rare. In the case under consideration, it appeared as if the lower end of the tibia, together with the astragalus, were torn from the os calcis and navicular; the ligaments were also destroyed. The ordinary dislocations of the foot are familiar to the practitioner and student; of these, the dislocation inwards, as in the case under review, is most common—the fibula, as a general rule, is broken. Indeed, the most superficial acquaintance with the mechanism of the joint will show why this occurs, and that in point of fact the mischief begins in the fibula; for, without a fracture of this bone at its weak point, two or three inches above the outer ankle, the lower end of the limb could not be thrust across the articulation. An interesting peculiarity of the present case seemed to be that the fibula was *unbroken*, its head resting in the old place of the head of the tibia, impacted perhaps among the broken bones of the foot, and resisting the reduction—the astragalus torn away and broken.

Simple dislocation of the astragalus is a very formidable injury, and may require amputation; the ligaments are ruptured, and the bone will not unfrequently become necrosed, and make its way through the integuments; it is not difficult then to see how a compound injury of the sort under consideration came to be looked upon by Mr. Simon with very grave attention. Even without fracture, if the head of the bone is not removed, great difficulty arises in the reduction, the upper surface is turned down, and the bone gets hitched like a hook in the tibia.

All of the best surgical authorities advise amputation, if the ends of the tibia, or astragalus, or calcis are broken; much nicety of judgment, however, will be required, quite as much as in a gun-shot wound from a shot or shell. A very short time is allowed for deciding on saving the limb or amputating. The very serious questions arise, whether you will submit your patient to long and tedious inflammation and suppuration, to abscess, with its train of weakening symptoms, perhaps mortification, and fever, and secondary amputation, when its benefit is in the last degree questionable. If the patient is unhealthy, too, or irritable, all the chances are against him; and even at best the limb is completely spoiled, as the chief nerve and artery have been broken across.

Then, on the other hand, the man loses his leg for what he conceives a very simple accident; his prospects in life, as in the case of this poor painter, are all but blighted. You may as well take his life as "the means by which he lives," and trusting to himself or to his friends, all about him, their wish will be to save the leg.

Mr. Simon, having first tried all the usual means of reduction, having the system well under chloroform, &c., put the foregoing circumstances well and feelingly before the poor man; all efforts at reduction failed, and he submitted to the operation. The amputation was of the flap kind below the knee. The man is now nearly well.

ABSCESS OF THE TIBIA.

A case of abscess of the tibia, lately in hospital, a very rare disease, may prove interesting in connexion with the previous case. The boy is going out quite well.

George Edwards, aged 16, a sailor, came in on the 24th of September, under the care of Mr. Mackmurdo. He complained of pain in the tibia, and swelling; his appearance would not lead any one to suppose there was anything scrofulous or syphilitic in his constitution; his most troublesome ailment, pain of the bone, of which he could give no history; it seemed in fact, simple phlegmonous inflammation of the cavity of the bone. After all the usual treatment adapted to get down inflammation had failed, very eviden suppuration set in. The shin-bone became completely bowed; the skin covering the tibia, tense, and glistening at a distance; and if showed the parts, without knowing the bone situated underneath, a superficial glance would lead one to say, it was an ordinary abscess, which a lancet would open in a second. The boy resisted its being touched, but at length, about a month after coming in, submitted to have it opened. He was put under the effects of chloroform, or perhaps never would have allowed of the operation, which lasted for more than a quarter of an hour, and reflected much credit upon the operator; on cutting down to the periosteum, the greatest difficulty presented itself to get to the purulent deposit; a good strong knife was used first with little effect, a Hay's saw was next tried, the gouge, &c., and Mr. Mackmurdo had all but given up in despair, when the cavity of the bone seemed at last reached; large

quantities of thick white pus immediately flowed out, and he felt at once relieved; he has not had one bad symptom indeed since. The case is one very seldom met with.

KING'S COLLEGE HOSPITAL.

BY
HENRY SMITH, Esq., F.R.C.S.,
(Formerly House Surgeon to the Hospital.)
AND
BY ROBERT C. R. JORDAN, Esq.,
House-Physician.

INJURIES TO THE CHEST AND WOUNDED LUNG.

Among the numerous cases of accidental injury which are constantly brought into this hospital, wounds and fractures of the parietes of the chest form no small item, and, although the majority of them are simple, and present no features of particular interest to the surgeon, nevertheless instances every now and then occur which are replete with instruction. The injury most frequently received from any severe blow upon the parietes of the chest, consists of a simple fracture of one or more ribs; and, for the most part, these cases, with ordinary treatment, and with care on the part of the patient, turn out well, and there is no necessity for a strict confinement to bed, or to the internal discipline of an hospital. But, when the nature of the accident is such that a great amount of force is applied, the lesion may be more serious, and a most formidable complication result; the patient will either be rapidly destroyed, or, if he survive the first shock, the utmost caution and skill will be required to carry him safely through the serious dangers with which he is beset. The injury may consist in extensive fracture of the bony parietes of the thorax, without any grave amount of damage to the important organs contained therein; or there may not be such extensive injuries to the osseous textures, and yet the lungs may have received serious mischief. In the former class of cases, it will be sometimes difficult to ascertain with precision, during life, what injuries the patient may have received, and it will only be after death that the real mischief will be revealed.

On the morning of August 20, a fine muscular man, 50 years of age, was brought into the accident-ward: he had fallen from a window of a third floor into the street below. He was collapsed, although he was conscious, and able to answer questions. His pulse was imperceptible, pupils dilated, and his face was deadly pale. He complained of great pain in the back, more especially about the region of the left scapula, and, on examination, crepitus could be distinctly felt on the thorax to the right of the upper portion of the sternum, and quite a hollow was discernible there during the movements of expiration. The breathing was carried on with difficulty, and chiefly by the abdominal muscles; surface of the body was quite cold. He was ordered to take small quantities of brandy, and hot bottles were applied to his feet.

When Mr. Fergusson visited the hospital, he examined the patient, and he considered that there was a dislocation backwards of the sternal end of the right clavicle; he discovered fractures of several ribs on either side. The patient had been suffering intense pain in his back, and was continually groaning; pulse irregular, about 65. The face presented such a blanched appearance, that it was thought probable that some internal hæmorrhage was going on. Mr. Fergusson ordered the continuation of stimulants, and the chest to be bandaged.

21st. The patient suffers much pain, and is constantly groaning. The pulse is somewhat stronger, but very irregular. The thorax has been bandaged well with a roller, which has been passed around his right arm to keep it to his side. He is ordered to take brandy and laudanum occasionally.

22nd. The collapse continues; there is still the same marked irregularity of pulse, and that peculiar aspect of countenance which almost surely denotes coming death. Last night he coughed up a large quantity of grumous blood. The breathing is still carried on chiefly by the abdominal muscles, and he is in great pain. He continued in the same condition until three o'clock on the morning of the 23rd, when death put a termination to his sufferings.

On a *post-mortem* examination, most extensive injuries, chiefly confined to the walls of the chest, were ascertained to have taken place; but that which was considered to be a dislocation of the clavicle was in reality an extensive fracture of the upper portion of the sternum separating the joints of the right clavicle and of the first rib from the remainder of the bone; and by this means a considerable depression had been produced, which thus simulated a dislocation of the clavicle backwards. The greater number of the ribs on the left side were fractured, and at one or two places, the fractured extremities had wounded the pleura, but had not seriously injured the lung. There was a considerable amount of bloody serum in the cavity of the pleura; and it appeared as though one of the intercostal arteries had been torn. On the right side also, the first, second, and third ribs were fractured.

Here was an instance of severe injury to the walls of the chest, which caused death from the shock which was necessarily the result of the accident. The patient never rallied more than in a very slight degree from the time that he was first brought in. There was the appearance of internal hæmorrhage going on from the first; and on the *post-mortem* examination a sufficient amount of blood was found in the cavity of the pleura to justify the correctness of this suspicion, although the bleeding had not been so great as to cause death. There was some slight injury to the investment of the lung; and in all probability, had the patient recovered from the first shock, inflammation of the pleura would have ensued.

This case was looked upon as one of special interest, as the injury appeared to be very similar in its nature to that which caused the death of Sir Robert Peel. A great outcry was made, by some foolish persons who did not see the case of the lamented baronet, about the impropriety of his medical attendants not bleeding him: the case just related well shows the absurdity of having recourse to bleeding directly after such a severe injury. Drawing blood away from the system would surely, under such circumstances, only hasten the sufferer's death. It is a far different thing, however, when the patient has recovered from the collapse, and when re-action has set in, accompanied with all the signs of severe inflammation; it is then right to bleed, especially when the injury to the chest is complicated with lesion of the lungs. The benefit of this plan of treatment was observable in a case which was under the care of Mr. Partridge, when I was acting as house-surgeon to the hospital. A fine, tall fellow was mending a sky-light on the top of one of the houses in Lincoln's-inn-fields. By some mishap he fell through the glass to the bottom of the house, a distance of between sixty and seventy feet. When brought to the hospital, I found him severely injured. He had received a wound on the head; the left thigh and the right leg were fractured; several ribs on the left side were broken, and there were contusions all over the body. The patient was in a state of collapse. At first, little was done beyond giving some stimuli, and it was thought almost an impossibility that he could recover. However, after the lapse of many hours re-action began to set in. Hæmorrhage from the lungs, to a considerable extent, took place, and this was soon followed by intense pain and dyspnœa. The pulse rose and became full and bounding. These symptoms were met by the exhibition of tartar emetic and opium; but they were not ameliorated, and I was compelled to bleed the patient largely from the arm, which measure gave immediate relief; and, after a lengthened period, he was sent out of the hospital well. Now, had this patient been bled some hours earlier, before re-action had occurred, in all probability a far different result would have ensued. This was a case of severe injury to the chest implicating the lungs; but these organs may be wounded, and become inflamed, yet the symptoms may not be so severe, and the patient may not require the abstraction of blood; but less vigorous measures will suffice. An interesting case of this nature has just been treated in the hospital.

A young man, aged 18, was run over by an omnibus on the 7th September, and was immediately brought into the hospital. On examination, the left femur and several of the ribs also on the left side, near their angles, were fractured. The respiration was carried on with difficulty, and the patient was suffering considerable pain, and he was in a state of collapse. The fracture of the thigh was set, and a long splint was applied; strips of plaister were placed over the left side of the chest, and a roller was

carried around the left arm, and then around the chest, so as to keep the parts as quiet as possible.

For the next two days the patient went on pretty well; he partly rallied from his depression, and was relieved of his pain by small doses of morphia; but symptoms arose which indicated injury to the lung; he had slight spitting of blood, and there was some emphysema of the left side; the breathing was difficult, but he still continued low. He was ordered to take small doses of antimonial wine and morphia, and to have beef tea, &c.

On the 10th the breathing was rapid, 36 in the minute; pulse 100. On applying the ear to the left side of the chest, small crepitation and a rubbing sound were distinctly audible; the countenance indicated distress, and was still pallid. It was evident that very active measures could not be employed; yet it was necessary to check the pneumonia. He was ordered half a drachm of antimonial wine and ten minims of laudanum every three hours.

On the 11th he felt much easier; there was less distress, and the respirations had become less frequent.

12th.—Has slept well during the night, and his appetite is good; the auscultatory signs are still plain—small crepitation is audible over the injured part; respiration chiefly by the abdominal muscles. He feels pain in the chest when he draws a breath. Respirations 32, pulse 102. From this time he gradually improved; without any more active treatment the distress became less.

In this instance the symptoms were not sufficiently severe to call for general bleeding, they yielded to a mild antiphlogistic treatment. This case differed in some important respects from the one before narrated, in which venesection was employed; the subject of the latter was a feeble youth, and the shock of the accident was such that no decided reaction occurred; consequently the various phenomena which are induced by a wound of the lung, were by no means so severe or distressing as those observed in the former, where the patient was a large and vigorous man, and where copious hæmorrhage ensued from the lung, followed by the most distressing embarrassment of breathing.

With respect to treatment in these cases, it is a question about which there can be little diversity of opinion. In the far greater number of cases of idiopathic inflammation of the lung which are met with in London, it is possible and even judicious, to dispense with the withdrawal of blood from the general system; and recovery is often seen under the use of the tartar emetic and other appropriate remedies; but where the pneumonia is traumatic, as from a fracture of the bony parietes of the chest, or from some penetrating instrument or gunshot, there can be no doubt that a full bleeding from the arm should be resorted to, and repeated if the symptoms are intense and if the patient be robust. The benefit of venesection is also most decided if it be employed at the very onset of the attack. I particularly remarked the efficacy of early and free bloodletting in a patient of Mr. Fergusson, whose case interested me much. It was that of a poor woman who had received a severe blow on the chest from the huge fist of her husband, who was a coal-heaver. She was brought to the hospital when I was house-surgeon there. Not many hours after her admission, symptoms of inflammation of the lung began to show themselves, the most striking of which was a great distress of breathing. I immediately opened a vein in the arm and bled her fully; the greatest relief was at once obtained, the symptoms rapidly declined, and the patient was convalescent in a few days. I could not be certain whether there was actually inflammation of the lungs from the injury in this instance, as there was neither hæmorrhage nor emphysema present, of which signs one at least, and generally both, are attendant upon an injury to the lung from violence. The symptoms, however, of a wounded lung, will not unfrequently be absent, even when the lesion is very severe; this will, in a great measure, depend upon the amount of re-action which ensues after the accident has happened. If the patient dies from a shock a few hours afterwards, there will not be time for the most decided signs to appear; thus, in a very stout patient of Mr. Fergusson's, who had fallen from the British Museum, and who died not many hours after his admission to the hospital; I found, after death, several ribs broken; and the lung severely lacerated by their broken and rugged extremities; yet no bleeding from the mouth had occurred; even if the patient lives for days and weeks, and the lung be severely wounded; there may be no hæmorrhage; the absence of it was striking in a patient of Mr. Partridge's, who had received a gun-shot wound in his left side, and who lived nearly three weeks. The ordinary signs of pneumonia soon appeared, but there was no hæmorrhage, and it was considered probable that the ball had only taken a superficial course. On *post-mortem* examination, however, it was found that the ball had traversed the substance of the lung, and the most intense inflammation had ensued, which caused the death of the patient.

Sometimes emphysema,—although, as a general rule, it follows an injury to the lung from a broken rib,—will not be apparent; if, with other symptoms, which are even somewhat dubious, this be present, it will set the question at rest.

Hæmorrhage, even although a most important sign, as regards the treatment which is to be pursued, is not conclusive of an injury to the lung; nor, on the other hand, as has before been stated, does its absence clearly indicate that there is none. H. S.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, November 23.—Medical Society of London. *Subject*:—Mr. Coulson on the Nature and Treatment of Enlarged Subcutaneous Bursæ. Eight o'Clock.

Thursday, November 28.—South London Medical Society. Eight o'Clock.

Saturday, November 30.—Guy's Hospital Physical Society. Eight o'Clock.

——— ——— Medical Society of London. *Subject*:—Dr. Cormack on a Case of Cauliflower Excrescence from the Os Uteri, &c. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 23.

ALLEGED LUNACY AND FALSE IMPRISONMENT IN JERSEY.

In another part of our columns will be found a circular-letter, which has been forwarded to us, and we presume to our contemporaries, by Mr. William Bailey, secretary to the alleged Lunatic Friends' Society, accompanied by the report of a case of alleged insanity and false imprisonment which has recently occurred in Jersey. It appears that a Miss Harriet Patrick, described to be a woman of passionate character, had conducted herself violently towards a gentleman named Captain Rock, in whose house she lived, and who, to protect himself, sent for the constable of St. Heliers, by whom she was summarily, and without further authority, taken up and placed, not in a police office, but in one of the cells allotted to females of deranged mind in the General Hospital. Hence a complaint was laid before the authorities, upon which the Attorney-General adopted the usual form of convoking six principal witnesses before the Royal Court, to depone as to the mental state of the accused. After the evidence had been fairly gone into, the Court pronounced its decision, that "a great illegality had been committed in placing Miss Patrick in one of the lunatic cells without any authority, and ordered the said lady to be set at liberty." The Secretary of the alleged Lunatic Friends' Society has, in the exercise of his functions, taken up the case, notwithstanding the ends of truth and justice were already fully satisfied, inasmuch as the lady was, as we have stated, liberated, and has her redress at law against the parties implicated in the transaction. "I cannot help, however," observes Mr. Bailey, "contrasting the laws and customs of Jersey,—the good old Norman laws of our ancestors,—where no person can be confined as a lunatic, or be deprived of the administration of his property,

without six of the principal people of the same parish, and competent to form a judgment, appearing in open court to testify as to their derangement and incapacity; thus the liberty of the person is guarded with the utmost care and precaution." We do not consider the present system in England, or, rather, the forms prescribed for the admission of persons accused of lunacy into asylums, by any means satisfactory; but this appeal to a petty jury, in an open court, would be a very cruel mode of procedure. There is no family so afflicted that would willingly endure so distressing an exposure; and we feel assured that this "good old Norman practice" would be repudiated by every person possessing the least feeling or humanity. "The result, or consequence, of this open-court practice," continues the Secretary, with an air of triumph, "is, that with a population of more than 40,000, which this island contains, there are not forty persons in confinement on the ground of lunacy, while in England, according to the Report of the Commissioners, there is more than one person in every 200 confined in public or private lunatic asylums." The inferences here drawn are by no means legitimate. What is the fact? There is not a lunatic asylum in Jersey of any description, public or private, and persons so afflicted must, of necessity, be sent to the general hospital. The result is obvious. We cannot expect that families who can avoid it will send their relations into the "cells" of the general hospital; yet they would, in all probability, avail themselves of a well-conducted lunatic asylum, if such existed. It is precisely to this *desideratum* that the story of this wronged lady points. Why is there not a lunatic asylum in Jersey? Why should even the forty persons referred to as being now "in confinement on the ground of lunacy," be consigned to the "cells of the General Hospital," instead of being provided for in an asylum specially devoted—as in other countries——to the care and treatment of the insane? What evidence have we that there are no more than one in a thousand cases of lunacy in the island? May not many be shut up in private houses for the want of such an establishment? Again: the inference that the number of lunatics in England is dependent on the defective state of the law of lunacy, is vastly absurd. That the public would be better satisfied were an improved system adopted, may be true; but why does not the alleged Lunatic Friends' Society come forward with some specific suggestions for the amendment of the law of lunacy? Why do they not devise some other measures—some better code for the protection of the insane, and the regulation of public and private asylums, than the one of which they complain? This would evince a disposition to carry out, in a healthy spirit, the professed object; and, instead of being the "*alleged*," they would become the *real* Lunatic Friends' Society. To vapour over abuses that exist, and suggest no remedy for them, is mere idleness; and we confess that we see little in the present case which they can fairly cavil about. Undoubtedly, the lady was improperly confined as a lunatic; but, as soon as the case was made known, and brought under the notice of the authorities, an investigation was instituted, and she was forthwith liberated, with an opinion strongly expressed by the court of the illegality of the proceedings which had been adopted. What more could be desired? But, in all probability, the lady never would have endured any such indignity or confinement if a properly conducted lunatic asylum had been in existence. The physicians attached to it would have pronounced that she was not a lunatic,—they would have returned the case as ineligible for admission; but, on the other hand, we may ask, what, unfortunately, becomes of those unhappy persons in Jersey who really are lunatic? The "cells"—as they are significantly called—of the General Hospital must assuredly be sorry receptacles for their mental sufferings; and we therefore avail ourselves of this opportunity of calling the attention of Sir Thomas le Breton in particular to the expediency of a lunatic asylum being established at Jersey for the benefit of the insane belonging to the Channel Islands.

MR. SYME, OF EDINBURGH.

There are few subjects more painful to the mind of one whose constant effort is to elevate the moral tone of professional intercourse, than to see men, occupying high places, forgetting the dignity of their position and that of their profession, and engaging in angry and bitter personal controversies.

Many years since, the Edinburgh College of Surgeons established a Professorship of Surgery. When this became vacant by the translation of Mr. Turner to the newly instituted Chair of Surgery in the University, Messrs. Lizars and Syme were competitors for the Professorship; to which, after a keen struggle, Mr. Lizars was elected by the Fellows of the College. Some ten years since, Mr. Lizars resigned this chair, the duties of which being considered superfluous, the lectures at the College of Surgeons were then abandoned.

In his turn, Mr. Lizars filled the office of Surgeon to the Infirmary; and in his turn, also, he resigned that appointment. Can there be a doubt that Mr. Lizars has the right to style himself *late* Professor of Surgery to the Royal College of Surgeons, or *late* Surgeon to the Royal Infirmary? There can be none. Who would object to Dr. Watson styling himself late Professor of Medicine at King's College, or Dr. John Taylor appending to his name "late Professor of Clinical Medicine in University College"?

Satisfied that vindictive feeling or petty jealousy could alone have prompted a man to object to Mr. Lizars naming the honourable offices he had filled, and unwilling to lower our profession by permitting one holding Mr. Syme's position to degrade himself in the eyes of the world by the display of such paltry feelings, on receiving the subjoined letter from the President of the Royal College of Surgeons of Edinburgh, we declined, by private note, to allow this journal to be the medium for personal attacks; stating at the same time that our pages were open to Mr. Syme to disprove Mr. Lizars' facts, or to overthrow his arguments. But Mr. Syme persists in letting the world know the impotent spite and reckless jealousy, that we would have had him hide from public gaze. Not content with "nursing his wrath," he will air it. Here, then, is the letter we were anxious, for the sake of his own good name and the credit of the Profession, its writer should have destroyed:—

[To the Editor of the Medical Times.]

Mr. Syme presents his compliments to the Editor of the *Medical Times*, and begs to request insertion of the enclosed letter.

Edinburgh, 1st November, 1850.

Sir,—My attention has been directed to a letter in the *Medical Times* of Saturday last, from Mr. John Lizars, which appears intended to throw discredit upon a mode of treatment that I have recommended. Of the cases related I know nothing; but as to the reporter, in justice to the practice impugned, I think it requisite that your readers should be made aware of the peculiar position in which he stands as an authority with regard to matters of fact.

Some years ago, in order to check a system of abuse, which threatened to disturb the peace and degrade the character of the Profession, I instituted legal proceedings against Mr. Lizars, and obtained a verdict with costs and damages in the Jury Court, for

false and calumnious statements relative to my practice. Soon afterwards Mr. Lizars repeated his groundless story, and I commenced a second action, of which he anticipated the result by paying the expenses, and addressing to me a letter of apology, confessing that there were no grounds for his statements.

In these circumstances, your readers may determine how far any testimony from such a source should influence their judgment.

I am, Sir, yours, &c. JAMES SYME.

P.S. For many years there has been no such office as Professor of Surgery to the College of Surgeons; and for the last twelve years Mr. Lizars has had no connexion whatever with the Royal Infirmary of Edinburgh.—J. S.

Mr. Lizars adduces facts to prove the injurious results of perineal section in stricture; the answer of Mr. Syme is, that he, Mr. Syme, has had a personal quarrel with Mr. Lizars, and, therefore, the latter is unworthy of credit! Report says Mr. Lizars is not the only surgeon with whom the self-styled one pure surgeon of Scotland(a) has come into collision. With, perhaps, the greatest operator that ever lived, one whose place he vainly strove to fill, Mr. Syme was long at feud; and another surgeon, second to none in Europe, report also says, stood one long day at the Infirmary gate, whip in hand, to administer to the President the chastisement from which the shield of the Baillie at last alone protected him.(b) Who was right, or who was wrong, we pretend not to say; but when a man seeks a quarrel with every one who refuses to submit to his rule, or surpasses him in reputation, the Profession regard the personal charges of such a man with great suspicion.

We cannot conclude without declaring our regret at being compelled thus to notice Mr. Syme; without expressing a hope, that the President's moral feelings may be one day purified; nor without assuring him also, that, although he is yet, as we fear, unable to blush for himself, his friends will most certainly blush for him when they read his miserable and contemptible letter.

OUR LEGISLATORS!

THE spirit of legislation is abroad. Every man who enjoys a seat in Parliament fancies himself a Solon. Law making—law breaking—law mending, under the auspices of St. Stephen, immediately become his business; he puts up with one hand and pulls down with another; and, after all, often turns out a very sorry "Cabinet-maker." Hence the many abortive attempts which have been made to reform the medical profession—hence such charming specimens of senatorial wisdom as the following.

The honourable and learned Member for Bodmin—Mr. Wyld—very recently introduced into Parliament the Bill of the National Institute. He has therefore taken his stand on the pedestal of a great statesman! The only misfortune of such a position is, that exposure to the breezes of popular applause is apt to induce a state of feverish excitement and hyper-political activity, attended with watchfulness, restlessness, and a general sense of *malaise*, often endemic in the House of Commons. Thus Mr. Wyld rose in his place, and, in alluding to the British Museum, complained that, although Dr. Paris was *ex officio* a Trustee, his book on "Artesian Wells" was not to be found in the library. The neglect of presentation was a grave one; and the Judge Advocate, a trustee, wrote officially to Mr. Panizzi on the subject, who forthwith communicated with the President of the College of Physicians, whose laconic reply was, that the book was not to be found in the library of the Museum for the simple reason,—that he had never written it. "*Vive la science!*" exclaims Molière's hero. The solution of the difficulty turned out to be, that, the learned Member for Bodmin having heard or read of the artesian wells of Paris, concluded they meant a book by Dr. Paris, and was surprised to find it not in the library. Alas for the scientific information of Mr. Wyld! Alas for those for whom he legislates! When Edgeworth's "Irish Bulls" was published, an ignorant country farmer wrote to the bookseller to inquire for how much they were to be sold by the score; and another wiseacre sent for Tooke's "Diversions of Purley," imagining, from the title, that it was a book of *jeux d'esprit* and games. The blunder of Mr. Wyld—mistaking a man for a city—is quite as amusing as that of mistaking a book for a bull, and equally deserves a niche in the laughter-loving columns of *Punch*.

(a) See Mr. Syme's letter to the Lord Advocate, in which the President of the Royal College of Surgeons of Edinburgh, made a charge of a most serious nature against the President of the College of Physicians of London, without having made a single inquiry as to the truth of the rumours of the man he was about to calumniate.

(b) Those who, like Mr. Syme, are given to impute motives to men, may perhaps find in this fact some explanation of the attacks recently made by Mr. Syme upon London surgery, or, rather, upon the practice of *a* London surgeon.

OVARIOTOMY.

WE publish, in another part of the Journal, a letter from Dr. Frederick Bird, containing a list of the cases in which he has performed an operation for the removal of a diseased ovary. In thirteen cases the tumour was extirpated; in four, the result was fatal; in eighteen other cases, he has employed small incisions as a means of diagnosis. The letter leaves the question of the propriety of including ovariotomy among the recognised surgical operations, in the same state as after the discussion at the Medical and Chirurgical Society; but we yield with pleasure to Dr. F. Bird's request, that, as the details of the cases are shortly to be published in this Journal, we should suspend our judgment until the whole evidence on both sides has appeared before the public.

We must do Dr. F. Bird the justice to say, that he has come forward most willingly with the declaration required of him by the Profession, that he would publish in full, and as soon as possible, the cases of which he spoke at the Medical and Chirurgical Society. Until the publication of those cases we shall abstain from remark; and it will give us sincere pleasure to find that they are of such a character as to reflect credit on the judgment of Dr. F. Bird as a physician, and on his accuracy as an observer.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

THE FUNCTIONS OF THE PANCREATIC JUICE.

THE experiments of M. Bernard on the functions of the pancreatic juice, accepted as they were by the French Academy without a dissentient voice, applauded as they were by Majendie, and welcomed by the physiologists of this country, have been lately carefully repeated in Germany, and the result has been, that Bernard's opinions respecting the influence of the pancreatic fluid in causing the digestion and absorption of fatty substances, have been rudely shaken, if not altogether overthrown. Bernard's series of experiments may be reduced to three orders:—1. He tied the pancreatic ducts in dogs, and then fed the animals with fatty substances; he could perceive no milky chyle in the lacteals, but the unchanged fat was found in the large intestines. 2. He injected fat into the stomach of a rabbit, in which animal the pancreatic duct opens separately from, and at some distance below, the gall-duct; he killed the animal three or four hours afterwards, and found milky chyle in the lacteals only below the point where the pancreatic duct opened. 3. He laid bare the pancreatic duct, and, having obtained some of the

fluid, found that it formed at once a milky emulsion with oily substances. None of these experiments have been confirmed, or, if they are correct, they are susceptible of a different interpretation. Frerichs, and Schmidt, and Bidder have repeated the first frequently. They tied the pancreatic duct in cats, and, after the animals had fasted for twelve hours, so that no pancreatic fluid could be supposed to remain in the stomach, they fed them with milk, fatty meat, or butter, and killed them in from four to eight hours subsequently. They always found the most beautiful milky injection of the lacteals, proving the absorption of fat without the aid of the pancreatic fluid. The second experiment of Bernard, although correctly reported, appears to have been incorrectly interpreted by that observer. Schmidt and Bidder forced butter into the gullet of a guinea-pig; two hours afterwards, they found the lacteals immediately below the pylorus very milky; two hours subsequently, these vessels were more or less empty, but the vessels lower down were filled with fatty chyle; six hours after the ingestion of the fat, the vessels below the pancreatic duct were milky; and three or four hours after this, the milky lacteals were found only at some considerable distance below the pancreatic duct. The fact is, then, that Bernard always killed his animals from six to eight hours after the fat had been given, and when it had descended so low in the intestines as to fill those lacteals only which were below the pancreatic duct. With regard to the third observation, Frerichs finds the saliva and the bile form an equally complete emulsion with fat as the pancreatic juice does. Another experiment of Frerichs seems by itself conclusive against Bernard's hypothesis. In young dogs and cats which had fasted for a long time, he tied the intestine below the opening of the bile and pancreatic ducts, and injected below the ligature milk, with olive oil or albumen and oil emulsion, or olive oil by itself, and found, after two or three hours, the lacteals filled with fatty chyle. This experiment seems conclusive also against Brodie's original opinion; but Frerichs does believe the mixture of bile and saliva to have an influence in ensuring the fine division of the fat. Schmidt and Bidder have also repeated, with great care, Bernard's experiments upon the decomposition of fat during absorption, and have demonstrated their incorrectness.—*Bidder und Schmidt unter Assisterz von Lenz. de adipis Concoctione et Absorptione. Diss. inaug. Dorp. Liv.* 1850. *Abstracted in Lehmann's Physiologischen Chemie-Zwiet. Band,* 1850, p. 109-10.

THE USE OF THE LIVER.

In some interesting lectures, delivered at the College of France, M. Bernard gave the following summary of his views on this subject:—Three several products, viz., sugar, fat, and fibrine, are formed in the liver; *whatever the aliment may be, the liver transforms it into these three substances;* hence the great variety of aliments does not derange the composition of the blood. One great use of the liver is, then, to maintain in the blood those conditions without which a tolerable uniformity of composition would be impossible. The liver may, then, pre-eminently be regarded as an organ of sanguification, being assisted herein by other organs, such as the spleen and chyliferous apparatus. In addition to this, the liver is an eliminating organ, and Bernard adopts the opinion that it is complementary to the lungs in its separation of carbon.—*L'Un. Med.*, Sept. 3.

By the side of these rather crude statements of M. Bernard, it may not be useless to place the exact chemical details of the composition of hepatic venous blood, as given by Lehmann:—The blood of the hepatic vein, compared with the blood of the vena porta, is much poorer in water; its water, as compared with that of the portal vein, is, during digestion, as 3 to 4, and, after perfect digestion, as 5 to 12. The clot of the blood of the hepatic vein is voluminous, and while 100 parts of portal blood separate 34 parts of serum, the same quantity of hepatic vein blood separates only 15 parts. The hepatic vein blood is much richer in cells, both coloured and colourless, than the portal blood; the colourless corpuscles are of the most various sizes and shapes; the coloured, in heaps, have a distinct violet tint, and their walls imbibe water, and are more easily destroyed than the cells in the blood of other vessels. The blood cells of the hepatic vein are poorer in fat and in salts, and especially poorer in hæmatin, or at least in iron. The intercellular fluid (liquor sanguinis) is much denser than that of the portal vein, and contains much more solid matters; with the exception of the *fibrine, which either is wanting, or is in very small quantity.* If in 100 parts of serum of portal blood, 8·4 parts of solids are contained (84· per 1000,) in the serum of hepatic blood there are 11·8 of solids in 100, (118· per 1000.) On comparing the individual solids of the serum, the hepatic-vein blood contains less albumen *and less fat*, and much fewer salts, but the quantity of "*extractives*," and especially of sugar, is excessively increased.—*Lehmann's Phys. Chem., Gr. Band.*, P. 249.

HOME CORRESPONDENCE.

SCOTLAND.

OPENING OF THE WINTER MEDICAL SESSION AT EDINBURGH.

The winter session of our university was opened on Monday, November 4th, by Principal Lee. The reverend Principal's introductory discourse turned on the foundation of the University of Edinburgh, the rise of its library, and the means by which the new buildings had been provided; to which was added some very judicious advice to the students as to the kind of conduct which was incumbent on them. The discourse was listened to with much interest and attention. On the following day the medical professors opened their courses, and the attendance of students was particularly promising.

On Wednesday, the 6th, the Extra-academical Medical School was opened with a discourse by Dr. George Wilson, lecturer on chemistry. There was a full attendance of lecturers and students in the hall of the new school behind the College of Surgeons. The Professor of Clinical Surgery in the University, Mr. Syme, was present, as President of the Royal College of Surgeons, along with the President of the College of Physicians, and a number of the medical practitioners of the town.

Dr. Wilson's discourse was admirably adapted to the audience and to the occasion. Dr. W. premised, that he did not feel himself competent to speak in detail of the duties required of a practitioner in medicine, having himself become conversant with these as a patient rather than as a practitioner. He would leave such details to the several lecturers in whose particular province a reference to practical points lay. He would confine himself to general views suggested by the field of study which lay before them. He would advise every student, while it was still time, to consider seriously with himself whether he had a proper vocation for the study and practice of medicine,—whether, by his frame of mind, he had such a calling towards medicine as would carry him through the difficulties of his studies, and reconcile him to the particular disadvantages under which the life of a medical practitioner lay. That with such a calling every difficulty would vanish, and the path of study would become easy, and the course of after-life smooth—without such a bent of inclination that nothing was to be looked for in his future prospects but unavailing regrets and bitter disappointments. He took it for granted that those before him, in general, looked to the profession of medicine as the future means of gaining their bread—that their intended profession was to be to them what the Germans called "bread-labour." That this was a kind of prospect which being kept steadily before them would carry them through many difficulties, not otherwise to be easily surmounted. But if they looked to the medical profession exclusively in the light of a source of gain, they would degrade one of the noblest of the callings amongst men; and would make a very grievous mistake if they took that profession for one in which the money-making spirit could be exercised with advantage, there being no occupation in which a greater amount of gratuitous labour is exacted, and even necessarily exacted, than medicine. But if they would content themselves with an honourable competency, there were many most worthy sources of gratification which the study and practice of medicine were fitted to supply. He would not try to deter them from a wish to indulge in a well regulated ambition of distinction among their fellows—an ambition which did not seek to become exalted by the depreciation of rivals, but while it granted to every man his due, and could see those who had superior merit rise above itself without feelings of envy or jealousy, still went forward energetically to gratify itself by such means as were unequivocally legitimate. That for such an ambition the medical profession afforded ample scope. That the right study of medicine served to cultivate the whole man—that whoever desired to improve all his faculties would in it find the means of doing so. That in this respect it was easy to show that it bore the palm over the study of theology, the study of the law, the pursuit of the fine arts, without any attempt to conceal that each of

these in turn could boast of developing in a special manner some particular capacities of man's intellect. That it was natural for the student, at the outset of his studies, to feel anxious to learn how he might best secure to himself the advantages of improvement promised by a course of medical study; it was natural for him to be eager to be assured how he might make the most of his time, how he might best avoid misemploying it. That it was possible, however, to have too much anxiety on this head. That his advice to the student was, to begin without captiously inquiring into the merits of the course of study prescribed for him. That the probabilities were all in favour of that course being a good and proper course; that it had not been devised without much thought, by men of wisdom and experience, both in the difficulties of education and in the wants of the practitioner; that it might have its faults; that it might not be the most excellent plan possible, but that it must at least be good. And why waste time in the vain attempt to settle what is the most excellent plan, when, without any loss of time, a good plan is ready to our hand; a plan, by following which, hundreds have already prepared themselves to attain skill and reputation amidst all the difficulties of the medical profession? Let not the student then waste valuable time in debating whether the amount of study apportioned by our licensing medical boards, to the several subjects in the curriculum, be exactly square with the wants of the future practitioner. Let him take that for granted, let him believe that it is so,—faith being the foundation of all science,—that while he doubts, the time which should be employed in exertion is consumed: let him make haste, then, to begin. That it never can be predicted with certainty, in a field so wide as that of medicine, from what source improvements shall arise. How often was it said formerly to them, the teachers of chemistry—Why waste the time and energies of the student on the whole range of chemistry, when his attention might so much more profitably be concentrated on the analysis of the blood, the urine, and other points of animal chemistry. Yet, how shortsighted has the experience of the last few years proved such reasonings to be, by showing that the greatest boon which practical surgery has ever obtained, namely, the discovery of chloroform, lay in a field altogether different from that towards which it was proposed to direct the student's attention! And how many more examples of a like character might be brought forward!

He urged the student, then, to believe, that the course of study prescribed to him is fitted to expand all his faculties in the right direction, as well as to supply him with the knowledge of the details necessary for the practice of his art. That the course of study before him had the signal advantage of combining the study of science with the practice of art; that he is called on to apply his attention to the laws in obedience to which natural phenomena occur, and to put his hand to the imitation and combination of those phenomena by rules drawn from practice. That a great part of the pursuits in which his studies engage him are designed for a gymnastic effect—to train his faculties of sense and intellect to observe and discriminate, and his hands to execute—in short, that the prescribed course of the student's preparation has for its object, not merely to impart knowledge, but to discipline all the requisite powers of mind and body; as well to teach the hands to obey the head as the head to direct the hands. Dr. Wilson dwelt at some length on the importance which should be attached to this gymnastic effect of the course prescribed for the student; he pointed out the high importance of the education of the senses, beginning with the sense of smell, so extensively applicable to the appreciation of morbid phenomena, and the detection of certain poisons; and then drawing attention to the numerous occasions on which the sense of hearing and the sense of taste were applicable in the daily duties of the medical man, as well as the more highly-prized senses of touch and sight; and, after exhibiting the many aspects under which the intellectual faculties were susceptible of improvement by an assiduous application to the prescribed course of medical studies, he proceeded to touch on their possible effects on the moral character; that in medicine there was more room for active benevolence, than for indulgence in sentimental feelings; that to do good to one's fellow-creatures is essentially at the bottom of the practice of medicine; that this object should never be lost sight of—that no man is fit to engage in medicine whose soul is so sordid as to look only to his self interest amidst the sufferings of humanity; that nevertheless there is much in the studies and pursuits prescribed to the student, which tends to blunt the finer susceptibilities of the heart; and hence that it is a part of every student's duty, in such circumstances, to keep a guard on himself, and to take means to counteract the tendencies to coarseness of feeling and an indifference to suffering which it could not be denied some of his occupations exposed him to.

Dr. W. concluded by pointing out the difficulties which beset the young practitioner on his first entrance into practice, showing how effectually these are to be surmounted by diligent preparation for these days of trial, and consoling the pupil with the assurance that the public are not unindulgent, and, when they have reason to think a young man has not misemployed his time, that they have a prepossession in his favour, and often appreciate his skill and acquirements, even at the moment when they are making jokes on his inexperience.

Such are the dry bones of Dr. Wilson's lecture, after all the marrow of eloquence which they possessed in his hands has been distilled away.

GENERAL CORRESPONDENCE.

THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

Sir,—The homœopaths profess to treat their patients with doses of the decillionth of a grain, and speak of the active effects of these infinitesimal doses on the system; but it must be evident to any unprejudiced and rightly-constituted mind that there must be great delusion, if not great dishonesty in this. A few of those who practise homœopathy may do so in good faith, under the influence of a love for the marvellous; but the majority of them are influenced only by the love of the *quocumque modo rem*, and would practise this or any other dishonesty for their own selfish purposes.

The number, a decillion, is so enormous, that for all finite purposes it may be considered as infinite, and, like infinity, is beyond the conception of the human mind. It is expressed by a unit followed by sixty cyphers.

If a grain of any drug be represented by a sphere having a diameter of one-tenth of an inch, then the decillionth part of this grain would bear a less proportion to a globule of human blood than this globule of blood does to the mass of the whole earth. Again, if this grain were mixed with some inert substance, and divided into a decillion of "globules," each having a diameter of one-tenth of an inch, and if these can be imagined to be strung like beads, and stretched out to their full extent, they would reach millions of millions of millions of millions of millions of millions of millions of times from the earth to the sun and back again. Lastly, if every planet were as thickly populated as our earth, and if every inhabitant of these planets took one of these globules every minute, it would take millions of millions, &c., &c., of years to consume this one grain of the drug. If any one, after making these calculations, can believe that any effects are produced on the human system by one decillionth of a grain of anything, the best place for him will be Bedlam or St. Luke's.

I am, Sir, yours &c., H. Barrett.

Watlington, Oxon, Nov. 13, 1850.

[To the Editor of the Medical Times.]

Sir,—It cannot be unobserved by your readers, how ready the homœopathists are to cry out if any strong expressions are used against them, but how very silent they are, if any straightforward and cool refutation of their doctrine is brought before them.

On the 11th of May last, I sent a few remarks to your journal on the subject of homœopathy, and, although the periodicals advocating this doctrine have teemed with references to ill words made use of against them, they have never deigned to give any explanation to me and others who have considered their system temperately.

I will, therefore, with your leave, repeat a question which was the principal purport of my prior remarks:—Will the homœopathic body, unitedly, give a definite, logical meaning to their great principle, "*similia similibus curantur*;" that is, will they say, without the possibility of mistaking the meaning, what is the true interpretation of the words "*similia*" and "*similibus*?" What noun-substantive agrees with these adjectives, or are they many in number? In seeking for the truths of homœopathy, I was sorely perplexed by finding the foundation always sinking beneath me, and, therefore, again I ask any lover of truth to come forward and fix the meaning of the above words, and thus enable us to eradicate from our shelves all those false homœopathic works whose authors have used the motto as a mere plaything, or for the most sordid motives.

As I expect some honest Hahnemannist will favour me with a reply, I might also refer to a very ready test for the efficacy of the small doses, and on which he might also give me his experience. It is well known that the homœopathic theory is illustrated by cases drawn from ordinary practice. I will mention a few, which I think will be found in all their works. The Hahne-

mannists are obliged to admit that ague is cured by bark; but then, say they, it is because bark produces ague. In the same way, they agree with us, that a dose of ipecacuanha is useful to get rid of an undigested meal, and a dose of rhubarb of a diarrhœa crapulosa; but these are so many proofs of their law. Also, scurvy is cured by lemon juice, because produced by it; syphilis by mercury, because that drug produces syphiloid symptoms; and we rub a frozen nose with snow because in this instance snow is the morbific cause. Here, then, are cases (unless exception is made to the very cases which prove the rule) in which homœopath and allopath (as we are nicknamed) are both agreed as to the remedy, and the only question remaining is as to the dose. The homœopath admits, that the above-named disorders are cured by our quantities. What I ask him then is, Are his infinitesimal doses well-rubbed, equal in efficacy to ours? Will he show us, in proof, cases of ague cured by infinitesimal doses of bark; cases of vomiting and purging produced by infinitesimal doses of ipecacuanha and rhubarb; scurvy cured by a fractional quantity of lemon-juice, and syphilis by a like dose of mercury? Pray, too, is the rubbing applied to the frozen nose of the smallest possible amount? Perhaps here is a source of fallacy, as the remedy would previously have to be triturated to make it efficacious. If your journal be not open to discussions of this nature, still a clear exposition of the homœopathic doctrines by some other source would be acceptable to all anxious inquirers. I am, Sir, &c., SAMUEL WILKS, M.B.

Bethel-place, Camberwell.

OVARIOTOMY.

[To the Editor of the Medical Times.]

SIR,—A short but sufficiently satirical notice in your last Number, on the subject of ovariotomy, is, I am informed, intended for myself; and, without attempting to detract from its wit, you will, I am sure, allow me to add to its truth. Founded as it is upon the table of cases presented to the Medical and Chirurgical Society on Tuesday last by Dr. Lee, and the remarks of subsequent speakers, to which my own, I have no doubt, contributed, I can readily understand how you or any one may have arrived at an erroneous conclusion.

Disappointed by Dr. Lee's paper, and surprised at its object, I was not at all prepared to speak with statistical exactness of the large number of cases of ovarian disease that I have seen; and my inability to be accurate without reference to my case-books, has served to make the operation of ovariotomy appear less successful than it really is.

I beg to append to this note a brief outline of the cases in which I have operated; from which it will be seen, that I have extirpated ovarian tumours thirteen times, nine of the patients having completely recovered, and four having died; that I have once failed to extirpate the tumour, and death resulted; and of the fatal cases it can be hereafter shown, that the death in two instances did not result directly from the operation.

As I have stated, I have often made small incisions, in cases in which the chance of preserving the life of the patient by the operation might have been lost, from the impossibility of otherwise completing the diagnosis in the absence of adhesions; in some the tumour was subsequently extirpated, and in none did a fatal result ensue. In most of these cases the incisions were only sufficiently large to allow of the effect in the diaphragmatic movement on the tumour being observed, the thrusting in of the finger amongst the convolutions of the intestines in the pelvis being but a flight of fancy of the speaker whose words you have quoted. It is scarcely necessary to remark, that, if an ovarian cyst be adherent to the abdominal parietes, the finger cannot be thrust in among the convolutions of the intestines, or to suggest, that the position of those viscera in cases of ovarian tumour is not in the pelvis.

Allow me to add, that, as the details of all my cases will be immediately forwarded to you for publication in the *Medical Times*, it may be well to suspend, for a short time, your judgment upon the propriety of extirpating ovarian tumours.

Cases in which Ovarian Tumours were Extirpated.

S. G.—Large non-adherent tumour; complete recovery. Present at operation, Dr. H. Roe, Mr. B. Phillips, and others.

Miss H.—Large non-adherent, but sessile tumour; complete recovery. Present, Dr. H. Roe, Dr. Capc, Mr. B. Phillips, and others.

Mrs. W.—Large colloid tumour, generally adherent; complete recovery. Present, Dr. Locock, Dr. Merriman, Mr. B. Phillips.

Miss M.—Simple sac, of large size; complete recovery. Present, Dr. Ferguson, Mr. J. F. Clarke, Mr. B. Phillips.

— —.—Tumour, adherent at pelvis and without pedicle, rendering it necessary to leave a segment of the cyst; recovery. Present, Dr. H. Roe, Mr. Parrott, and others.

H. T.—Large adherent tumour of great thickness; complete recovery. Present, Dr. Elliot, Mr. Chance, and others. This patient was under my care in the Metropolitan Free Hospital, and was the first instance of a successful operation in hospital practice.

Miss D.—Large tumour; sessile; died on third day. Present, Dr. Murphy, Mr. Streeter, and others.

Mrs. H.—Two large tumours, involving both ovaria; complete recovery. Present, Mr. Blagden, Mr. Cholmondeley, Mr. Streeter, and others.

Mrs. G.—Small tumour; died on fifth day. Present, Dr. Rigby, Mr. Chance, and others.

Mrs. L.—Tumour bound down in pelvis, causing greatest suffering, and tapped every ten or twelve days; died on third day. Present, Dr. Rigby, Dr. H. Roe, and others.

— —.—Large compound tumour; died at end of the week. Present, Dr. H. Roe, Mr. Holt, and others.

— —.— Large cyst, with very short pedicle; complete recovery. Present, Dr. Rigby, Mr. Skey, and others.

Miss K.—Large and slightly adherent cyst; complete recovery. Present, Dr. P. Smith, Mr. Holt, and others.

Case in which the Tumour could not be Removed.

Mrs. P.—Very large malignant mass, adherent inseparably at its posterior surface; extreme suffering from distension by solid matter and rapidly approaching death, rendered the attempted operation justifiable; sank on the next day. Present, Dr. Rigby, Mr. Holt, and others.

Cases in which Small Incisions have been made to determine the Presence of Adhesions, or to allow of the Escape of unusually Viscid Secretions.

Mrs. P.—Small incision; then tapped; now living. Present, Dr. Ansell, Mr. Huxtable, Mr. Chance, and others.

Miss —.—Small incision; then tapped; now living. Present, Dr. Dr. Wilks, Dr. H. Roe, and others.

Miss —. —Incision of rather larger size; lived about two years. Present, Mr. Coulson and others.

Mrs. —. —Incision to ascertain adhesion as well as nature of a superficial tumour attached to the ovarian mass, and to evacuate the contents from the semi-purulent state, of which the patient was sinking; aged 55; lived for six weeks, then sank from her disease. Present, Mr. Huxtable and others.

Miss G.—Incision discovered strong adhesions; lived more than two years. In the practice of Mr. Streeter, who was present.

Mrs. B.—Small incision; then tapped; lived three years. Present, Dr. H. Roe and others.

Miss B.—Incision; then tapped; lived six months. Present, Dr. Murphy, Dr. Snow, and others.

Miss B.—Incision; then tapped; now living, and has been often tapped since. Present, Dr. Rigby, Mr. Holt, and others.

A. B.—Incision; then tapped; tapped often since. Present, Mr. Chance, and others.

— —.—Incision; then tapped; tapped since. Present, Dr. Rigby and others.

Mrs. S.—Incision; then tapped; tapped several times afterwards. Present, Mr. Holt.

Mrs. C.—Incision; afterwards tapped. Present, Mr. Strecter. Died after the next tapping.

Miss G.—Incision to ascertain adhesion, and remove very viscid contents of sac; death on the next day from the bursting of a large hepatic abscess into the abdominal cavity. Present, Mr. C. Smith, Mr. Holt, and others.

Mrs. R.—Incision; patient now living after the lapse of nearly a year. Present, Mr. West and others.

Mrs. W.—Incision; then tapped; tapped many times afterwards. Present, Mr. Huxtable.

— L.—Incision; then tapped; was living a year afterwards. Present, Dr. Roe and others.

Miss S.—Incision; then tapped; now living. Present, Mr. Mosgrove and others.

Mrs. C.—Incision; then tapped; tapped many times afterwards.

Conclusion.—I have thus extirpated large ovarian tumours in thirteen cases; of which number, nine were completely successful, four unsuccessful; in one case the excision could not be effected, and terminated fatally. In eighteen cases I have employed small incisions as a means of diagnosis or relief, and in no case with any

bad results; thus leaving a total of thirty-two cases in the treatment or investigation of which recourse has been had to the knife.

I am, Sir, &c.,

53, Brook-street Nov. 16, 1850. FREDERICK BIRD.

THE RELATIVE MORTALITY IN THE HOSPITALS OF LONDON.

[To the Editor of the Medical Times.]

SIR,—Dr. Hare having done me the honour to notice my statistical paper read at the Medical Society, which gives, besides other data, the number of beds and total mortality met with at the eleven general hospitals of the metropolis, I shall esteem it a favour if you would allow me to say, when that communication appears in the *London Journal of Medicine*, to be published next week, Dr. Hare will perceive some of the questions he discusses are there only mooted in a general manner; whilst I state,—"I am fully aware, that those calculations must not be taken as absolutely free from all fallacy, since the admissions of sick patients may be more numerous at one establishment, than at another." My sole object in making any remarks being to elicit further inquiry. This, I am happy to find, has been already commenced. Being unable to ascertain the number of beds at University College Hospital, as at some other institutions, I applied to one of the medical officers at each of these charities, whose answers were adopted without hesitation, and so entered in the accompanying table. In reference to St. Thomas's Hospital, I would, however, beg leave further to state, that the number of beds is quite correct, the amount being derived from the hospital register, which I inspected in the office of my friend the treasurer, through the kindness of the gentlemen attached to that department. I merely mention these particulars to show the pains I took to obtain exact information; and, if there be inaccuracies, I will only now add my endeavour was to avoid error; indeed, excepting the remarks of your respected correspondent, although ten days have elapsed since the abstract of my paper was published in the *Lancet*, I have not received any reclamation impugning the statements it contained.—I am, Sir, &c.,

24, Brook-street, Nov. 18, 1850. JOHN WEBSTER.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

OF REFEREES, &c.

"Summa quidem auctoritate philosophi . . . Quicquid enim justum sit id idem utile censent itemque quod honestum idem justum, ex quo efficitur ut quicquid honestum sit idem, sit utile"—CIC.

[To the Editor of the Medical Times.]

SIR,—The apophthegm "Honesty the best policy" has often appeared to me to be still in that position, in relation to moral, that admitted truths have so often been in relation to physical science,—viz., flitting before our eyes, from year to year, without our perceiving the law which it exemplifies, or the multiform uses, at once practical and lofty, to which it might be applied. Do we not frequently see clever men, Sir, puzzling themselves with a multiplicity of questions, when, with half their ability, they need ask themselves but one, viz., "What is right?" Cicero is everywhere most happy in regard to the sophisms which obscure the real relations of the foregoing axiom; and Archbishop Tillotson seems to have spoken not more impressively than truly, when he says, that men take a great deal more trouble to get to hell than would suffice to carry them to heaven. I shall try, then, Sir, to consider "what is right," in regard to the "Transactions" of the Society, and to meet, as fairly as I can, the objections by which the suggestions of "what is right" have been at times opposed, under the various terms of "inconvenience," "inexpedience," or "utopianism." If people, however, are to argue, they must start with a datum, and I promise to be as little exacting as possible. I will require only the admission, that contributors of papers should be furnished with reasonable grounds of confidence that their papers will be fairly considered, and that their recommendation for publication in the "Transactions" should be given or withheld, as the case may be, according to their intrinsic merits in relation thereto, entirely irrespective of any position the author may occupy, or the opinions he may hold, as pleasing or otherwise to the Council.

Assuming this as a datum, we shall, in our inquiry, proceed more auspiciously if we work up-stream, and passing, for the moment, the ultimate decision of the Council, consider the question of the referees. Those gentlemen form by far the most important link in the whole of that chain which terminates in the volume called "The Transactions."

Though the jobbing in the Council were *all* that has been alleged, and which, in common fairness, I do not believe it to be,—though the President were ignorant or incapable of laying the points of the papers before the Society, or of regulating their discussion,—though every discussion were a desultory conversation directed against the opinions of the author rather than to test the value of his conclusions from the facts on which they were based; nay, though the Council should job in their ultimate decision, still, if *the referees were efficient, and their names and references public*, the author would be morally certain of justice; and not only justice, but advantage, as I shall hereafter show. It should not be forgotten, Sir, that the author entrusts the referees with a duty, the serious responsibility of which it is impossible to exaggerate, and which is voluntarily undertaken,—a duty which, whether it be viewed in relation to the steps by which the author's reputation is to be raised, his family supported, or his health and happiness secured from other inroads than the anxieties of his Profession, is one of the most sacred character, and, therefore, one in which ordinary and universally conceded securities for fair-play are surely the *barest* of all requisitions; but, above all things, the very last that he should be refused in regard to a duty the most sacred that one professional man can perform towards another, is that which, in a free country, is never denied to the most trivial, viz., the name of the party by whom he is to be judged. Let us then see how the Council fulfil these reasonable requisitions. In the first place, instead of allowing themselves to choose from the Fellows generally such referees as the respective papers may suggest to them as best qualified, they begin by restricting themselves to a body of thirty-six only, and, until very lately, twenty-four. I pass by the obvious absurdity of the Council *restricting* themselves to thirty-six men before the papers are in existence, and therefore before the authors or subjects are known.

The referees, however, having been thus selected, the choice of the two appointed to each paper is left *to one of the secretaries*, who is generally a young man, in every conceivable way least likely to have that experience which is necessary to steer clear of obvious difficulties. The *name of the author is known to the referees*, but the names of the referees are *never* known to the author, but to the President only; not, Sir, even to the Council, who are supposed to be assisted, if not guided, by their decision. Here, then, a section of the Profession is called on to give opinions of the fitness or unfitness for the Transactions of the works of their contemporaries, often their active though honourable competitors, and in a Profession having, of course, its share of piques and jealousies, and in regard to which it has been said, that there is scarcely an hospital to be found in London in which the whole of the medical staff are on terms of cordiality. To be sure, Sir, this is the *ne plus ultra* of corporate folly. Here we see an attempt to evolve the highest observance of moral duty by a plan which leaves only the lowest conceivable degree of social responsibility—which is not a whit more rational, than as if one man were to worship truth by the unclean oblation of a lie. As you may suppose, such machinery has excited no little indignation. We have no desire to repeat the terms—monstrous, devilish, and so on—which have been applied to it; but we admit that it is difficult to contemplate it in all its effects with that calmness and moderation which sound feeling and philosophy require should characterise even the language of just complaint; or to urge the Council to examine their acts with that earnestness which sincerity requires, and with that moderation which is also so desirable in affairs of gentlemen and Christians. Yet, Sir, it may be permitted me to doubt, whether the Great Tempter ever conceived a plan more calculated to repress all that is divine in our nature, or to surround all that is already too difficult to control with temptation. Here is a man in the hurry and anxiety of a professional life called to a duty, the conscientious discharge of which requires time, caution, thought; which, if it be performed well, brings no credit,—if ill, no censure, and of course without remuneration. Can we expect to develope talents like those enrolled by the Royal Medical and Chirurgical Society by such means? Do the Council in sober seriousness really expect to gather grapes from thorns like these? Is it conceivable that they expect to obtain the legitimate fruits of wisdom and justice by such revolting husbandry? With plenty of parallel cases before them, with the Royal Society—of which I shall have more to say in another place—they choose to repudiate alike precept and example, and treat us with a literary Star Chamber in 1850. And this is a tribunal before whom an author is expected to take claims of the most sacred kind, where the jury are veiled equally from the judges and suitors. The obvious and easy remedy for this would be, simply, to adopt one of two courses, each of which has been, I understand, urged on the Council. The

one, to suppress the name of the author till the referees had sent in their reports and the Council had decided; the other, to make the referees public with the names of the authors. But this measure would obviously secure the author justice, and would for ever destroy a plan to which many of the Council cling with marvellous tenacity. I see by the report of the general meeting, the other day, that Mr. James Arnott said, that *inconvenience* had been found to arise from the referees being known, and that, if he were called on to give an opinion, and to allow it to be published with his name, he should decline acting. It is very far from my wish to disturb any gentleman, as regards the ethics in which he may rejoice, or to express the least doubt as to the intention of Mr. Arnott, under the circumstances he states; but I cannot but regret, Sir, that such a sentiment should have been uttered by a gentleman who has arrived at the full-blown phase of the system, expressed by the term President of the College; and as it would not be consistent with the duty which prompts me to write these letters to allow such a statement to pass unnoticed, I shall offer, in my next, a few remarks thereon. In the mean time I would observe, in regard to an insinuation thrown out from another quarter, viz., that if referees were obliged to give their names, that there would be a difficulty in obtaining competent persons for that duty, that it is my firm belief, that the worst enemies of the Profession never hazarded an imputation more entirely unfounded or unjust; and that in no country on earth would that number, of whom in all countries some may be found to whom it is applicable, be less than in the Profession or public of Great Britain.

I am, Sir, &c., SPECTATOR.

NOTE.—At the late meeting, I hear that Dr. Webster had some most conclusive facts in regard to the Royal Society, but which the impatience of some, who seemed to like voting better than listening, afforded him no opportunity of stating, but with which I trust he will still favour the Profession.

ALLEGED LUNACY AND FALSE IMPRISONMENT IN JERSEY.

[To the Editor of the Medical Times.]

St. James's Jersey, 12th Oct. 1850.

SIR,—Having met, on a casual visit to this island, with the account of a trial in the Royal Court, I have sent you the report, which I trust you will find to be sufficiently interesting to give it a more extensive circulation by transferring it to your columns, as a case involving the liberty of the subject under a form of law superior to that of England, the result of which, most happily, was that the lady was set at liberty.

I cannot help contrasting the laws and customs of Jersey, (the good old Norman laws of our ancestors,) where no person can be confined as a lunatic, or be deprived of the administration of his property, without six of the principal people of the same parish, and competent to form a judgment, appearing in open court to testify as to their derangement and incapacity; thus the liberty of the person and his property is guarded with the utmost care and precaution. I would contrast this with the practice in England, where the certificate of two doctors consigns a man or woman to the most horrible of all confinements (probably for his life, if in the hands of interested parties), depriving him at the same time of all civil rights, the certificate often concocted and signed in secret, rendering the boasted liberty of the subject a delusion and a snare.

The result or consequence of this open court practice in similar cases is, that, with a population of more than 40,000 which this island contains, there are not forty persons in confinement on the ground of lunacy, not *one in a thousand:* while in England, according to the Report of the Commissioners in Lunacy, there is more than *one person in every two hundred* confined in public or private lunatic asylums.

I trust that another session of Parliament will not be allowed to pass over without the laws of lunacy (both as they affect the liberty of the subject and his property) being placed on a more sure, rational, and improved foundation; so that, for the future, so many persons will not have to complain of the misery and ruin that have arisen from the present system; and to this very important object I very respectfully solicit your aid.

I am, Sir, &c., WM. BAILEY,
Secretary to the Alleged Lunatic's Friend Society,
No. 44, Craven-street, Strand, London.

ROYAL COURT.—Wednesday, Oct. 2.

Before Sir Thomas Le Breton, Knight, Bailiff, and Judges Ph. Le Maistre and E. L. Bisson.

Six Principaux of the parish of St. Helier, convoked at the instance of the Attorney-General, conformably to the demand he had made to the court, presented themselves at the bar to give evidence before justice as to the conduct and state of mind of Miss Eliza Harriet Patrick, who had been shut up in the General Hospital.

Mr. Advocate Godfray opposed the interrogation of the Principaux, as his client did not reside in the parish of St. Helier; but in that of St. Lawrence, the constable of which alone had a right to lay the information. He asked, also, by virtue of what authority this person had been placed in the cells among females of deranged minds; and as she had been left for several days among lunatics, and losing her usual rest, was it to be wondered at, if she appeared somewhat stupefied to those persons who had been to interrogate her at the hospital. It must also be noticed, that of the six Principaux summoned, more than half were scriveners.

The Attorney-General replied, that when this woman was placed in the hospital, she resided in the parish of St. Helier, and it was on the complaint of Capt. Rock, at whose house she lived, that the constable of St. Helier had her taken to the hospital. If she had been placed in the lunatic cells, he could not tell who had given the order. This woman was of a very violent disposition, and Capt. Rock had been compelled to have recourse to these measures, as she had not only threatened to put an end to her own life, but also to that of his children.

Mr. Advocate Godfray replied, that all the persons in the hospital were surprised to see this woman among the lunatics, and they all agreed in saying that she was perfectly quiet, and of a very mild disposition.

The Court, in adopting the principles advanced by Mr. Advocate Godfray, was of opinion, that they had no right to alter the practice, and that the information should have been given by the constable of St. Lawrence. The Court was further of opinion, that a great illegality had been committed in placing Miss Patrick in one of the lunatic cells without any authority, and ordered the said lady to be set at liberty.

MERCURY IN TYPHOID FEVER.

[To the Editor of the Medical Times.]

SIR,—The notice by your French Correspondent, of a paper on the Successful Treatment of Typhoid Fever by Mercury, in your journal of the 2nd inst., gave me much pleasure, on account of the corroborative testimony it bears to my experience, and the conviction I expressed in the *Lancet* of March 2nd, that mercury was not only a remedy, but, the *sheet-anchor*, in the treatment of that disease, in its latter stages and severest forms. At the same time, and in a subsequent letter, *Lancet*, July 15th, I spoke of emetics, followed immediately by a stimulant, as the most suitable remedy in the early stages and milder forms of the disease, to which letters I beg to refer your Correspondent. I am glad to see he also suggests that this mode of treatment could be most satisfactorily tested at the 'fever' hospital; and I trust, that the subject being thus urged upon Dr. Jenner a second time, may induce him to permit such a trial. In the last of the very interesting and instructive series of papers which have appeared in your journal upon typhus and typhoid fever, from the pen of Dr. Jenner, he states the mortality from typhoid fever to be as high as 25 per cent. Under the treatment at present adopted, I venture confidently to predict, that the emetic and mercurial treatment, in their respective stages, would reduce it to 2 or 3 per cent.

Since the publication of the letters to which I allude, I have had the opportunity of testing them in a considerable number of cases, with the same unfailing results; and am daily more convinced that the disease is completely under the control of these remedies, and that scarcely a patient need be lost by typhoid fever.

I am, Sir, &c. JOHN DENNY.
Resident Medical Officer,
November 13th, 1850. Dispensary Stoke Newington.

CHOLERA has been very prevalent and fatal at Jamaica for some time past. The city authorities are exerting themselves, and a Sanitary Committee sits daily. The last reports state, that in Kingston, Port-Royal, and St. Catharines, its ravages are fearful. The deaths in Kingston average thirty a day. At Port-Royal about an eighth of the population has been cut off. The mortality is principally among the lower order of negroes. The north side of the island is free from disease. There is a great want of medical men in the island. At Kingston, with a population of 40,000, there are only ten, three in Spanish Town, and none in Port-Royal. Matters are still worse in the interior in that respect.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

November 12, 1850.

Dr. Addison, President in the Chair.

This being the first night of the present session, the rooms were crowded to excess. After the ordinary business of the Society had been transacted, the Secretary read the

HISTORY OF A SUCCESSFUL CASE OF OVARIOTOMY,

By W. E. DUFFIN, Esq., Surgeon;

WITH A DESCRIPTION OF THE MORBID ANATOMY OF THE SAC.

By ROBERT LEE, M.D., F.R.S.

A woman, 38 years of age, having her abdomen enlarged to the size of the eighth month of pregnancy, this size having been attained in seven or eight months, and her general health appearing to be good, applied to the author for relief by operation. The rapid growth of the tumour, which appeared to be connected with the left ovarium, had been accompanied by neuralgic pains in the right thigh, in consequence of pressure on the sciatic nerve of that side. The tumour was very moveable, indicating the absence of adhesions. The patient was very urgent in her desire for the operation, and very confident that it would be successful, and it was accordingly performed on the 27th of August last by the author, assisted by Messrs. Fergusson, Ure, and Henry Smith; chloroform having been previously administered by Dr. Snow. The incision, at first of only sufficient size to admit the fore-finger for exploration, afterwards enlarged to three inches, was made in the linea alba, midway between the umbilicus and the pubes. The absence of adhesions having been ascertained, the sac was punctured by a trocar, and 130 ounces of a viscid, ropy fluid, of a light-brown colour, were let out. The collapsed cyst, containing a smaller cyst, the size of an orange, was drawn through the incision, and its pedicle secured by ligatures. The tumour was then separated, and the pedicle and ligatures were prevented from receding into the cavity of the abdomen by other ligatures attaching them to the wound. The ligatures came away on the 15th day, and the wound was healed on the 22nd, the abdomen resuming its natural shape and size. The patient was kept on a light diet, took opium in sufficient doses for six successive nights, and the bowels were opened by enemata. On the 18th day she was able to get about a little. Her recovery is complete, and she has been able to resume the occupation of dressmaker.

DISSECTION OF THE CYST.

By ROBERT LEE, M.D., F.R.S.

The walls of the cyst are composed of three distinct coats or layers. First, a peritoneal covering; secondly, a middle, fibrous coat; and, thirdly, a dense, membranous sac, in which the fluid was contained. In the divided pedicle are seen the cut ends of three large arteries, and of one large vein, and of the Fallopian tube. The peritoneal coat is thin, and loosely attached at the root of the cyst; but, beyond this, it is thick, opaque, and firmly adherent to the tissue below. The middle coat is thick at the root, and contains numerous branches of arteries and nerves with ganglionic enlargements. It becomes thinner as it is expanded over the cyst, is of a dense, fibrous structure, and adheres firmly by both its surfaces. The internal membrane is firm and thick, and its inner surface is rough, irregularly puckered, and, in some, spots of a brown or yellowish colour. It consists of two distinct layers, like the coats of a Graafian vesicle. A smaller cyst is situated near the root of the larger, imbedded in its middle coat, projecting into its cavity and invested by its lining membrane, which it has pushed before it. The lining membrane of this smaller cyst also consists of two distinct layers like that of the larger cyst. A group of small multilocular cysts is contained in the middle fibrous coat of the great cyst, and between the outer surface of the smaller cyst and the peritonæum. They have the same structure, contain a similar fluid, and bear the same relation to one another as the two cysts above described. The author remarks, that the walls of this ovarian cyst contain all the elementary structures which enter into the composition of the human ovarium in the healthy condition,—peritonæum, stroma, and Graafian vesicles, with blood-vessels and ganglionic nerves. Whether all multilocular cysts are formed in the same manner, future observation must determine.

AN ANALYSIS OF 108 CASES OF OVARIOTOMY WHICH HAVE OCCURRED IN GREAT BRITAIN.

By ROBERT LEE, M.D., F.R.S., F.R.C.P.,

Physician to the British Lying-in Hospital, Physician-Accoucheur to the St. Marylebone Infirmary, and Lecturer on Midwifery and the Diseases of Women and Children at St. George's Hospital.

The author commences with the history of a case of ovarian dropsy successfully removed by a surgical operation, and reported in the *Edinburgh Medical and Surgical Journal* for 1822, by Dr, Nathan Smith, Professor of Physic and Surgery in Yale College, Connecticut. He then gives an account of an operation performed by Mr. John Lizars, of Edinburgh, in 1823, when *no* ovarian disease was found after the abdomen had been opened, and of three other operations by the same surgeon, when the diagnosis was more accurate, in 1825 and 1826; and of two operations by Dr. Granville in 1826 and 1827. He then refers to an operation performed in 1833 by Mr. Jeaffreson; and to three operations by Mr. King in 1834 and 1836. During the last twenty-seven years, the operation has been attempted or performed more than 130 times in Great Britain. Of 108 cases, of which authentic reports have been received, in 37 cases either no ovarian cyst or tumour to remove existed, or there were present ovarian cysts and tumours, the removal of which was found to be impracticable, and the operation was abandoned. Of these 37 cases, 14 died. The analysis given of 108 cases of ovariotomy shows that in 37, or about one-third of the whole number, it was impossible to determine *previously* whether ovarian disease actually existed, or, when it did exist, whether its removal was practicable. Of the 71 cases in which ovarian cysts and tumours were removed, 24 proved fatal, in 14 of which the operation could not be completed. In the tabular analysis of the 108 cases appended to the paper, it appears that 45 cases are reported by Dr. Clay, and 11 by Mr. Lane; and to both these gentlemen the author expresses his thanks for the manner in which they have communicated to him the entire results of their experience of the operation.

Mr. Cæsar Hawkins had for some time doubted greatly as to the propriety of extirpating diseased ovaries. The Profession certainly had not been made acquainted with all the facts in connexion with the operation; it is essential, however, that the fullest information should be afforded, and the particulars of every case in which an operation has been performed, or even attempted, should be placed on record, in order that medical men may be able to come to a decision as to whether or not the operation be justifiable. It is well known, that it has been performed in many cases, the results of which have not been published, and the impression is, either that the cases ended fatally, or that, from adhesions or some other cause, the operation could not be completed. It is singular that ten hospital surgeons in London have performed ovariotomy, and it affords a significant comment on the operation, that not one of them has done it a second time. He (Mr. Cæsar Hawkins) was the only one of these ten surgeons whose operation proved successful. He was much gratified, some little time ago, when, on his suggesting to Dr. Lee the advisability of tabularising these operations, in order that a correct conclusion might be drawn as to their value, the Doctor instantly made a note of it. The result is the valuable paper read that night, which was complete, with two exceptions. He trusted, however, that, before its publication, those gentlemen, whose experience and operations were not recorded in it, would enable Dr. Lee to render his paper and tables perfect, by communicating to him the fullest information he might desire respecting their cases. He did not know whether those gentlemen were in the room, but he would appeal to them—and he hoped he might do so without giving offence—to render Dr. Lee all the assistance in their power. He alluded to Dr. F. Bird and Mr. Walne: he appealed to Dr. F. Bird with the more confidence, as, when publishing his early successful cases, he had inveighed against those who kept back their unsuccessful operations, and thus prevented the Profession from drawing correct deductions as to the value of the operation. Dr. F. Bird was, of course, entitled to make known the results of his experience when and in whatever way he chose; but he was bound, by his own writings, not to keep them concealed from the Profession.

Dr. F. Bird was surprised that Dr. Lee had not mentioned his cases, as in his note he had informed him, that he (Dr. Bird) had operated twelve times, eight times with success, and four times with a fatal result.

Dr. Lee had omitted all reference to Dr. F. Bird's cases and those of Mr. Walne, because from neither could he obtain such a report as was necessary to complete his ana-

lysis. Neither would supply him with the particulars of cases in which the operation had been attempted, but from some cause or other had not been completed. He concluded by calling on the Secretary to read Dr. Bird's note, which the secretary accordingly read.

The President asked Dr. Bird, whether cases had not occurred to him in which he could not extract the tumour?

Dr. F. Bird was aware, that in some cases our means of diagnosis would fail to indicate the presence or absence of adhesions; but he should not hesitate even then to make an exploratory incision; if adhesions were found, the wound may be closed without any dread of peritoneal inflammation. If there were not any, then the tumour might be extracted. He had made between forty and fifty exploratory incisions, and no bad results had followed. He had sometimes found that where he had expected to find adhesions, none such existed, and he was able to remove the disease.

Dr. Lee had a note in his hand, the author of which referred to a case operated on by Dr. F. Bird, at the Free Hospital, which terminated fatally.

Dr. F. Bird had only once removed an ovarian tumour at that hospital, the patient being now alive and in good health. Probably Dr. Lee referred to a case where a small incision was practised previous to tapping, there not being any intention to perform ovariotomy.

Dr. Lee remarked, that of thirty-seven cases in which the operation had been attempted but could not be completed, fourteen had ended fatally. It was evident, therefore, it was not so harmless a proceeding as it is reported to be.

Mr. Cæsar Hawkins would again urge on Dr. F. Bird and Mr. Walne, that every particular respecting these operations should be made known to Dr. Lee, that his tables may be complete, so that the Profession may be able to draw correct and legitimate deductions as to the value of the operation. He was sure that every Fellow of the Society would join in that wish. It now appears that Dr. Bird, besides his twelve cases of ovariotomy, has opened the abdomen by an exploratory incision, but was obliged to close the wound because adhesions, &c., prevented extirpation. As these must be regarded as attempted operations, inasmuch as had it been in the operator's power he would have completed them;—these 40 cases, with the 37 spoken of by Dr. Lee, make 77 attempted but unfinished operations, about one-half of those recorded by Dr. Lee, with the 40 additional of Dr. Bird's. He (Mr. Hawkins) then read the paragraph by Dr. F. Bird, condemnatory of concealment in these cases, and strongly urged him to furnish Dr. Lee with all the information in his power, and thus aid him in the attempt to elucidate all the points of importance respecting this operation. The Profession, he said, would not consider his exploratory incision justifiable, unless he made known the details of the cases.

Dr. J. B. Thompson mentioned that, in the East, two-thirds of the cases of this disease recovered; at least it was so at Damascus, where he was engaged professionally under the Turkish government.

Mr. B. Phillips, in energetic language, condemned the conduct of those who, content themselves with publishing their successful cases, leaving the unsuccessful ones in obscurity; and said, that unless the Profession had a code of morality different to that of society generally, such conduct could not be justified. He alluded to the position in which Civiale was placed, a few years back, by reporting 244 cases of lithotrity at the Necker, and 236 cures, he having omitted to state that he had sounded 97 other cases, which he rejected for operation. Had they been added, the cases would have been 341, cures 236, the reverses being 1 in 3, instead of 1 in 30. This he thought a parallel case to the concealment of the exploratory incisions. Unless all cases were published, how could the mortality in great operations be ascertained. Owing to this plan of concealment, an error had been made in his statistics of amputation; the mortality, instead of 23 per cent. is nearer 27. Of course, no one can be enforced to publish the results of his practice; but, if he publish at all, he should give the whole truth. The 40 or 50 exploratory incisions, unwillingly mentioned by Dr. F. Bird, were, beyond all doubt, instances of operations commenced, but not completed, on account of the attendant difficulties. He thought that a simple non-adherent cyst might be removed by extirpation.

Mr. Cæsar Hawkins was not inclined to admit, with Mr. Phillips, that the simple serous cyst was admissible for operation. It was certainly more likely to be successful, but it was only when great danger was apprehended, that so formidable an operation as ovariotomy was justifiable. It has been said that ovarian disease may continue for twenty or thirty years, but this he doubted; the distinction had not been fully drawn between serous cysts of the broad ligament and true ovarian disease. In the former the fluid is transparent, and re-collects irregularly after tapping, of which he gave an example. That disease admits of prolonged life, and extirpation should not be performed. In the ovarian tumour, with a thick, tenacious muco-purulent fluid, rapidly re-forming after it has been drawn off, and a great liability of the disease to become multilocular, and to terminate life in a few years, even so dangerous an operation as ovariotomy is admissible.

Dr. Tilt commended the principle on which Dr. Lee had proceeded, and trusted that he would follow it out, and classify the cases. Some cases of ovarian disease are chronic, and some acute. In the chronic cases in advanced life, after the cessation of the menses, he did not think the operation advisable. In young women the operation may sometimes be had recourse to. He had seen thirty-six cases in young women, from 18 to 36 years of age; and in these persons it is generally fatal in two or three years. Of these thirty-six twelve died, twenty-four recovered. He would not say he would advocate the operation in all cases, but that it is justifiable in some; and the question is, how to find out those in which it should be performed. This cannot be done while reports of some of the cases are held back.

Mr. Phillips, in his remarks, had meant the simple ovarian cyst, and as, out of eleven operations, six were for the removal of that disease, four being successful, he conceived that the operation for its extirpation was justifiable.

Mr. J. B. Brown, after mentioning that he had removed a large ovarian cyst, the patient dying five days afterwards of peritonitis, gave an account of his views on ovarian disease, for which we must refer to the Report of the Medical Society of London, in last week's Number.

Mr. Lawrence had never seen or performed this operation, and, unless he greatly changed his opinion, he never should. Thirty-seven operations had been alluded to by Dr. Lee, in which there was either no ovarian disease, or it could not be removed. This was, however, too favourable to the proceeding; for, while beyond a doubt all successful cases had been placed on record, it was as certain that the unsuccessful ones were rarely made known. Dr. Lee's paper was, therefore, confessedly imperfect. If a correct account had been given of all the operations, the deaths, and the cases in which the operation had been commenced but not completed, it would be greatly added to. The tables furnished by Dr. Lee were, however, quite sufficient to place ovariotomy out of the list of recognized surgical operations. If the duration of life, and the kind of health enjoyed after the operation, could be ascertained, so as to be compared with its probable duration in those who have not been subjected to any such operation, it would tend more to demonstrate its chances. Of course, a considerable reduction would be made in the former for those who have died from the operation, whether it were finished or not. Perhaps Dr. Lee, in pushing his inquiries, might be able to ascertain this. He (Mr. Lawrence) had lately seen a woman who had been operated on by the long incision, and was said to have been cured. She presented a cicatrix extending from the ensiform cartilage to the pubes; but there still remained a large solid mass of disease within the pelvis. He had had two patients under his care for many years with the serous cyst of the broad ligament, so well distinguished by Mr. Hawkins from the ovarian tumour, with its multilocular cysts, and its thick semi-fluid contents. He believed that they were still alive. One of these was a rather tall, well-made woman, in whom the disease showed itself in 1819, soon after her confinement. It progressed slowly, and did not require tapping till 1823, when a pailful and a half of fluid were removed. She remained for about two years, when she again required tapping, and three times more between that time and 1829, after which the secretion ceased. A purgative always relieved a sense of fulness, of which she afterwards sometimes complained. In June, 1842, he (Mr. Lawrence) saw her, and she was then in good health, and capable of any exertion. The other case was that of a lady, whom he tapped twice many years ago: there was an interval of four or five years between each operation. After the last there was not any relapse, and she continued to enjoy uninterrupted goodhealth. When seen by Mr. Lawrence sixteen or seventeen years

afterwards, there was not the slightest indication of abdominal disease. A singular statement had been elicited in the course of the discussion,—that a gentleman who had performed the operation twelve times, had also been in the habit of opening the abdomen by an exploratory incision, to assure himself whether the parts were in a fit state for operating. This he has done, he said, in from forty to fifty cases, and he further remarked, that in no one case had any bad consequences ensued. Had not the operator himself been the author of this statement, doubt and hesitation would have been at once expressed; for, in order to be certain that a tumour of this kind will admit of extirpation, the hand must be passed in to examine its situation and connexions; and for that purpose a rather large incision would be necessary. The operator must have been very fortunate, not to have excited inflammation in any one of his 40 or 50 cases; but, as such is not likely to becase in other instances, he (Mr. Lawrence) would not recommend any one else to imitate such an example. These cases, at all events, together with the 37 recorded by Dr. Lee, show the difficulty of diagnosis in ovarian disease. The operation proposed by Mr. Brown is not at all novel, and has always ended fatally whenever it has been done. It is more dangerous than ovariotomy, which certainly removes all the disease, while this leaves all the diseased growth behind, lights up inflammation in the great mass which is covered by the peritonæum, and in immediate juxtaposition with the abdominal viscera. He (Mr. Lawrence) had seen a similar operation performed many years ago, in several instances, every one of which ended fatally.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

Saturday, November 16, 1850.

Dr. J. R. Bennett, President, in the Chair.

ANEURISM OF THE AORTA.

Mr. Canton read the particulars of a case, communicated to him by Mr. Leonard, medical officer of St. Martin's Union, and exhibited the morbid specimen to the Society.

The patient was a female 37 years of age, who, about three weeks prior to her death, consulted Dr. Roe for difficulty of breathing, increased on going up stairs, pain in the arm between the shoulder and elbow, pain below the middle of the sternum, and through to a point under the middle of the left scapula, together with great depression of spirits. Late at night, on the 14th of April, 1850, Mr. Leonard was suddenly summoned to her, and found her with evident signs of collapse, accompanied with excruciating pain in the abdomen. She expired soon after his arrival. The body was examined 60 hours after death. The abdominal viscera were generally healthy, the lungs were gorged with venous blood, the pericardium contained a much larger quantity of fluid than is generally found, and the heart was fat and pale, with its muscular parietes thinner than usual. The aorta was extensively diseased, as far as the first intercostal arteries; behind the left sigmoid valve, and above the left coronary artery, was a large orifice, the size of a shilling, leading into an aneurismal sac, which pressed upon the pulmonary artery, thus causing a diminution of its calibre. One of its sigmoid valves was so compressed, that half its pouch was obliterated. There were two other irregular openings above the orifice of the sac, but not communicating with it. One of the bronchial glands above the aneurism was ossified. The head was not examined.

Mr. White exhibited a new medical inhaler, in which a great variety of drugs and some few chemicals may be inhaled in almost any proportions or combinations.(a)

MALIGNANT DISEASE AND GANGRENE OF THE LUNG.

Mr. Middleton exhibited a specimen of extensive malignant disease of the left lung, which he had taken from the body of a gentleman 30 years of age, whose death occurred the day before. He regretted that he had not had time since the decease to draw up the history of the case; but he believed the specimen itself sufficiently valuable to warrant his bringing it before the Society. He stated, that during life there was extensive dulness all over the left side of the chest, but it was impossible to ascertain whether the lung was solid, or the cavity of the left pleura filled with fluid. The enormous disease of the left lung, although it must have existed for six or seven months, was not the cause of death, which resulted from gangrene of the lower part of the right lung.

(a) The apparatus may be obtained of Mr. White, 82, John-street, Fitzroy-square.

THE MERCURIAL TREATMENT OF SYPHILITIC ERUPTIONS.

Mr. Hunt read a paper on the mercurial treatment of syphilitic eruptions, in which he contended for two important propositions. 1. That mercury was capable either of curing or aggravating all these diseases, according as it was administered. 2. That none of them would get permanently and radically well without mercury.

In reference to the first proposition, the author expressed his belief that mercury acted most favourably when its effect was sudden and intermittent, and that a continued course was liable to aggravate the disease. He believed the medicine would effect all its therapeutic benefits without irritating either the gums or the bowels, and he was accustomed to administer it in two or more successive and increasingly energetic courses, until the disposition to disease was destroyed. In reference to the second proposition, viz., that none of these diseases, generally speaking, would get permanently and radically well without mercury, the author alleged that the apparent spontaneous recoveries were for the most part only temporary, and that the alterative or non-mercurial cures were equally unsound, and to be accounted for on the theory that, under favourable circumstances, the system was capable of tolerating the presence of an animal poison for a time, and sometimes even for life; but even in that case, the children of the patient were liable to become affected, and that, in fact, a very large proportion of cutaneous diseases now existing in England proved to be cases of hereditary syphilis, originally treated, in the parent, without mercury.

Dr. Winslow inquired what was the precise nature of the shock which mercury was supposed to give to the system, and also what changes were effected by it in the organic nerves? He was also anxious to ascertain by what symptoms we could detect during life the existence of latent syphilis.

Mr. Dendy wished Mr. Hunt to describe the appearances presented by the syphilitic eruptions. Biett had led the Profession into error by speaking of them as always copper-coloured.

Mr. Hancock was desirous to know what guides the Profession might trust to respecting the courses of mercury, when it should cease, and when it should be recommenced.

The President recommended Mr. Hunt to reply to all questions, &c., at the close of the debate.

Dr. Daniels objected to the universal exhibition of mercury, for, although it was undoubtedly of service in the majority of cases, yet instances occurred in which it would prove injurious. He did not doubt that syphilis might be transmitted from parent to offspring, but he had also seen cases in which appearances resembling that disease had been discerned in the child, without any cause of suspicion in the parent; and he instanced the case of a person who died while under salivation for liver disease, in whose offspring pseudo-syphilitic signs were detected, without any indication of syphilis in the parent.

Dr. Crisp was of opinion that mercury would ultimately prove the most beneficial, but he thought that Mr. Hunt had not distinguished the primary sores sufficiently, and would wish to know if he would use mercury in all cases.

Mr. Hunt in his paper had alluded to secondary disease alone.

Dr. Crisp explained the transmission of disease from an apparently uninfected female to her male friend, alluded to by Mr. Hunt, by the possibility of infecting matter having been left in her genitals by a previous acquaintance. He remarked that pseudo-syphilis was not produced by mercury in the workers in quicksilver; while the natives of Africa, not using appropriate remedies for the disease, were very liable to disease of the bones. In no cases were the effects of mercury so evident as in the treatment of secondary symptoms in children.

Mr. B. Travers related a case of secondary symptoms in a married female, lately under his care, in whom, after the internal exhibition of mercury, twice pushed to salivation, and the use of the hydriodate of potash, had caused no other result than exasperating the local symptoms, and breaking down the health; inunction effected a cure. The patient had sores and an eruption on the back of the neck,

rupial crusts on the vertex, sore throat, a sore on the leg, and a discharge. The disease was of a year's duration, and was communicated by the husband, who had never had other than gonorrhea and gonorrheal sores. The treatment consisted in inunction; 5j. of the ung. hyd. f., being rubbed in every night, with bark and sulphuric acid, and a good nutritious diet. The rupial crusts were dressed with the ung. hyd. nit., and a gargle of muriate of ammonia was ordered for the throat. In eight weeks she was quite well. The inunction caused some degree of salivation. Mr. Travers had often seen inunction cure the disease, when salivation, by the internal use of mercury, had repeatedly failed.

Mr. Dampier had often found a primary sore in the urethra, in those cases of secondary disease where the patients denied its having occurred, and where there was not any external evidence thereof.

Mr. Robarts remarked, that Mr. Hunt had overlooked one of the causes of failure, when mercury was given. It is sure to fail in anæmic persons, unless its use be preceded by, or accompanied with steel, and also in plethoric individuals, unless saline purgatives and warm-baths constitute part of the treatment. The disease is both local and constitutional, and should be so treated. When mercury fails to exert its due effect, it is in consequence of some latent error in the system.

Dr. Golding Bird considered, that in no case was the use of mercury so satisfactory, as in secondary syphilis in children; but, as there were also, at all events in hospital practice, cacoœmia and anæmia to combat, the mercury should be followed up by iron, so as to build up the blood, and restore the strength; otherwise, in the course of a year or two, another form of disease, condylomatous sores, would appear. In anæmic cases he generally gave one grain of hyd. c. cretâ, with three or four of the brown sesquioxide of iron twice a day. The red sesquioxide is utterly valueless.

Mr. Dendy thought Dr. Golding Bird, Dr. Crisp, and Mr. Hunt were led into error in their cases by supposing that all copper-coloured eruptions were syphilitic, which was not the case, especially in children. Neither did the success of the treatment by hyd. c. cretâ prove their venereal origin, as other diseases than syphilis may be cured by mercury. He approved of Mr. Hunt's mode of giving mercury, and also of the use of tonics, both after and with mercury. He employed the syrup of the iodide of iron. He could not admit that mercury would not produce disease. He had always looked upon it as an intense poison, which cured syphilis by exciting a poisonous action which would wear out, while that of the disease would not.

Dr. Golding Bird had said, respecting his cases, that the children had secondary syphilitic eruptions. He had not used the term "copper-coloured." In the majority of cases the mothers were under treatment for syphilis at the same time. Tonics, as such, were not useful; they must be hæmato-genic, or blood generating, such as steel.

Mr. Nunn inquired of Mr. Hunt, who had stated that mercury acted on the organic nerves, how it was that it cured syphilis, which is a blood disease.

Mr. Hunt, in reply, observed, that the facts mentioned by the different speakers fully supported all his opinions. Mr. Travers' case was one of great interest, and he had frequently met with such. As regarded the signs of latency, the absolute fact that the disease was latent, rendered it impossible to detail them. A sufficient number of courses of mercury could alone, he believed, destroy the latency. He applied the term "syphilis" to that disease in which all the characters are present, and in their ordinary order. Every copper-coloured eruption is certainly not venereal, neither is every syphilitic eruption of a copper colour. Colour is no test of the disease. He urged the necessity of watching the effects of mercury more closely than had been practised, and coincided with Mr. Robarts and Dr. Golding Bird in the opinion, that in anæmic cases it was well to combine mercury with iron; and, in plethoric subjects, with evacuants and a reduced diet.

PATHOLOGICAL SOCIETY OF LONDON.

November, 5, 1850.

Dr. Latham, President, in the Chair.

Mr. Coulson exhibited a heart taken from a man aged 50, who had suffered many years from chronic bronchitis and dyspnœa. The dyspnœa became very urgent for 30 hours before he died. On examination there was general serous infiltration into the tissues, not amounting to anasarca, considerable effusion into the right pleural cavity, and the left pleura pulmonalis was entirely adherent. The pericardium contained three ounces of sanguineo-serous fluid; the liver was congested, and the kidneys large and mottled The weight of the heart was twenty-three ounces avoirdupois, and the aortic valves were very extensively diseased, one of them being partly separated from its attachments, so as to allow a portion of the curtain to be retroverted. The other valves were thickened and studded with vegetations, and a large part of the free fold of the mitral valve was covered by a thick and regular layer of recent lymph. The left ventricle was greatly hypertrophied and dilated.

Dr. Peacock remarked, that the heart exhibited afforded a very characteristic example of obstructive and regurgitant aortic valvular disease. The sigmoid valves were all much thickened and indurated, and must thus for a long time have formed an obstruction to the flow of blood from the ventricle into the aorta. When the attachments of the right valve, which was the most extensively diseased, gave way, and allowed its curtain to be retroverted, an aperture had been created, by which, during the diastole of the heart, the blood must have freely regurgitated from the aorta into the ventricle. To the operation of these two causes, the large amount of hypertrophy and dilatation of the left ventricle was to be ascribed. The patch of lymph on the free fold of the mitral valve lay directly in the course of the regurgitant current, and was probably a simple deposition from the blood. The specimen further afforded an example of what had been termed "aneurism of the valves." In the curtain of the posterior sigmoid valve, there was found a small sac, which opened into the corresponding sinus of Valsalva; and, again, in the free fold of the mitral valve there was a similar though still smaller sac, which communicated with the ventricle.

Mr. Toynbee exhibited a specimen of neuroma of the auditory nerve, which was removed from a man aged 60.

The only symptom indicative of its presence during life was a diminution of the power of hearing. The disease consists of a white tumour, about the size of a small bean, which occupied the internal meatus auditorius, and projects about a line beyond the posterior border. The shape of the tumour is conical, the small extremity being situated at the anterior part of the meatus. Its texture is firm posteriorly, and, upon being cut into, presents but little cellular tissue; anteriorly it is softer. The tumour is attached to a portion of the auditory nerve supplying the vestibule, the fibres of which enter its middle part, and they emerge at its anterior extremity, entering the vestibule with filaments from the healthy portion of the nerve. The nerve supplying the cochlea is unaffected by the tumour. The portio dura lies on its upper surface. Upon examination with the microscope, the tumour at its anterior part was found to be composed of distinct nerve tubes, which assumed the varicose form upon the slightest pressure, and of others about the same size, but more opaque, presenting in their walls distinct nucleated cells, and having the appearance of nerve tubes in the process of development, as delineated by Schwann: these two kinds of nerve tubes were about equally distributed through the anterior part of the tumour, and between them rounded cells were interspersed. The posterior part of the tumour was observed to consist of fibres running parallel to each other; they are not so large as the tubes in the anterior part; some of them present distinct nucleated cells.

Mr. Canton exhibited a specimen of ossification of the pericardium.

Master E. B., aged 11, in February 1844 suffered from a severe attack of acute rheumatism; a fortnight after its commencement, pericarditis supervened, and was treated by leeching, blisters, mercury, ptyalism, colchicum, &c. The following May the medical attendance ceased. Auscultation gave evidence of fibrinous deposit on the pericardium, and there was turbulent cardiac action with dyspnœa. In all other respects he enjoyed tolerable health until Nov. 1845, when pain in the region of the heart required antiphlogistic treatment and blistering for a short time. In April, 1846, he became the subject of a severe attack of hæmoptysis, which being subdued, was followed by ascites; this latter was with difficulty removed by diuretics, in June. In June, 1847, ascites re-appeared, but was again removed by the same plan

of treatment. In Sept., 1848, he was again dropsical, and continued so for several weeks. The ascites recurred at the close of 1849, accompanied by hæmoptysis, which for several days threatened his existence, but was ultimately stayed by gallic acid. His sufferings during the last three years had been very severe, and from this date (Nov. 1849) were still augmented, and obliged him to pass several successive nights supported in a chair. There was great abdominal distension, attended at times with severe pain in the epigastric region, œdema of the lower extremities and of the scrotum. A more formidable attack of hæmoptysis again took place in July, and lasted ten days. It now became manifest that the long-continued sufferings of the patient were drawing to a close; the dyspnœa became painfully urgent; the ascites was no longer amenable to treatment, and the violent action of the heart prevented him sleeping. Repeated auscultation led to the conclusion that extensive adhesion of the pericardium was present, with hypertrophy of the heart: some disease of the valve was suspected. During the whole of his illness the pulse maintained a strong, full, and rapid beat, and lessened the suspicions of valvular disease. The carotid and temporal arteries pulsated violently; a dry cough repeatedly harassed him, especially towards the close of his existence. Notwithstanding his disease and suffering, he grew in stature, and was at the time of his death six feet in height. He died rather suddenly on the 11th Sept.

Examination.—The anterior mediastinum was filled with old tenacious lymph. The pericardium firmly united to the heart, and in the adhesions, bony matter, forming a ring, was deposited, encircling the organ between the auricles and ventricles. The ring, in the chief part of its circumference, was an inch in breadth. The heart much enlarged; valves on right side healthy, on the left somewhat thickened. Abdomen: The whole surface of peritonæum overlaid with firmly-adherent lymph, obscuring and agglutinating the viscera; liver enlarged; kidneys healthy; ascites to small extent with a little recent fibrine on the small intestines.

Dr. O. Ward exhibited a portion of a gall-bladder discharged externally.

Miss T., aged 48, has had a very severe cough and purulent expectoration, attended with signs of a cavity in the left lung, and other symptoms of phthisis, more than twenty years. About eight years ago she had an attack of vomiting and diarrhœa with faintness, when a tumour was discovered on the right side of the abdomen, but apparently unconnected with the liver. As it increased in size, the tumour passed more into the centre of the abdomen, leaving a marked sulcus between it and the edge of the liver. For twelve months it had descended towards the right iliac region, where it pointed and burst in April last, a little lower than the edge of the transversalis muscle, and midway between the spine of the ilium and the pubes. The discharge at first was very offensive pus, followed in a few days by numbers of hydatids of various sizes, from a pea to a turkey's egg, and some very minute ones in clusters, with pedicles like a bunch of grapes, and striated externally. In about five weeks the hydatids were all expelled, and the pus became healthy and less offensive. The opening continued to discharge till August 11th, when she had another bilious attack, and the discharge ceased; the abdomen became tense and tender over the right side, with occasional rigors; and, on the 15th, the orifice re-opened, discharging pure bile, which continued to flow to the amount of about a pint a day till the 24th, when a slough came away, which, on examination, proved to be a portion of the gall-bladder, having small calcareous plates imbedded in it similar to some that had passed occasionally from the wound. The bile has continued to pass, in greater or less quantity, almost uninterruptedly to the present time, when there is about a drachm passed in twenty-four hours. The patient's health has varied considerably, as she is sometimes able to go about the house, and has again been reduced so low as not to be able to sit up in bed without support.

Dr. Garrod exhibited, for Mr. Denny, "a piece of bone and teeth," which were dissected from between two layers of membrane, forming the walls of an ovarian cyst, taken from a girl after death.

Eliza F., aged 22, single, was admitted at the Stoke Newington Dispensary under Dr. Dewsbury, August 9, 1850, with dropsical swelling, distending so uniformly the abdominal parietes, that it was difficult to diagnose whether it was ovarian disease or ascites. She complained of weakness and inconvenience from the weight and size of the body. She stated that she had been ailing for three years and upwards, during which period she had suffered much from pain in the left side of the abdomen, but had not perceived her body enlarging more than two years; that it had increased much more rapidly of late. She attended at the dispensary and slightly improved in health under tonics and diuretics, until a fortnight previous to her death, when she was attacked with peritonitis, and died on the 7th October.

Mr. Price attended her for a considerable period, for what he considered to be an ovarian tumour, and, four months previous to her being admitted a patient at the dispensary, (in consequence of the lady with whom she lived as servant having suspicions of her being pregnant,) he sent her to Dr. Lee, who pronounced the uterus to be unimpregnated, and confirmed the previous diagnosis, as to the existence of an ovarian tumour. On opening the abdomen, the left ovarium was found to have been converted into a cyst, occupying the greater portion of that cavity, the viscera of which it was compressing in every direction; a few recently deposited threads of lymph extended from its anterior surface to the peritonæum, lining the abdominal parietes; otherwise it was perfectly detached except by its peduncle, which was not larger than the little finger, and consisted merely of the obliterated Fallopian tube, enlarged vessels, and peritonæum. The cyst, together with the uterus and its appendages, were removed, and, on opening the cyst, from three to four gallons of a cream-coloured, opaque fluid escaped, suspended in which were numerous flakes of fatty matter; it also contained a conglomerate mass, as large as the fœtal head at six months, consisting of hair, (four to five inches long,) and this fatty substance matted together, and many smaller pieces of the same substance. The cyst was divided by transverse bands, and also into pouches, or smaller cysts, opening into the common cavity; adhering to the walls in places were considerable quantities of the fatty matter, and attached hair similar to that in the mass, and, between two layers of the membrane forming the walls of the cyst, on the left side was the specimen produced. The teeth are in every respect perfect, with their fangs inserted into processes of the bone, resembling the alveolar processes of the jaw. The right ovarium was rather larger than usual, congested, and contained several small cysts, the size of a pea, filled with fatty matter. The uterus presented the appearance, in all respects, of that of a virgin, and healthy, with the exception of slight congestion, which might be merely *post-mortem*.

Dr. Baillie mentions similar fatty matter, hair, bone, and the rudiments of teeth, (but without fangs,) having been found in ovarian tumours, and under circumstances leaving little doubt that they had been formed independently of impregnation, one case of which occurred in his own practice. Also a case published in the "Philosophical Transactions," where this change was found in the ovarium of a child, whose age did not exceed twelve or thirteen years, with the hymen perfect, the uterus not increased in bulk, as is usual at puberty, together with the other signs of puberty wanting. From the fact of the uterus being totally devoid of all those changes that follow impregnation, whether the fœtus be developed within its cavity, or, as in extra-uterine fœtation, within the ovarium or Fallopian tube; from the respectability of the girl's parents, together with the good character she herself had borne, and her anxious desire that her body should be opened for the satisfaction of her friends, in consequence of the suspicion her appearance had excited, Mr. Denny was induced to believe, that in this case there had been no impregnation. The consideration of this case suggests whether an ovum, which the stimulus of the catamenial period caused to burst from the Graafian vesicles, and which was prevented from passing off with the menstrual discharge, by the impermeability of the Fallopian tube, and might not become adherent to the lining membrane of the ovary, or Fallopian tube, and thus obtain nourishment, setting in action a power which may be inherent in it, of developing the structures of the body, but in an incoherent manner, without the power to regulate the formation, or to produce a circulating system, or nervous centre, necessary to the perfect development and independent life of the fœtus; the latter power may emanate from the male, exerting an influence in some way analogous to the electric influence exerted in crystallization, of attracting and arranging the particles so as to give a definite form, and thus to characterise the individuality of the salt.

The statistical information furnished by the record of these cases, especially with evidences of existing virginity, may, by affording data for physiologists, enable them at some future period to throw light upon the functions of the ovary and upon the elements supplied towards the formation, and the power exercised over the development of the fœtus by the sexes individually; and may also prove of practical importance, in removing the odium which a supposition of the necessity of impregnation might cast upon the fair fame of the innocent.

MEDICAL NEWS.

Mr. O'Reilly.—A statement contained in a letter signed "Philo," and recently published in our journal, to the effect that Mr. O'Reilly was the getter-up and factotum of the celebrated "Mail Delivery Office," having given pain to that gentleman, we take this opportunity of disassociating Mr. O'Reilly's name from the alleged connexion with that office, as we have been assured that he never was in any way a party either to the formation, or to the management of such public company.—Ed. *Medical Times.*

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 15th inst.:—

Bolton, Andrew, Ebchester, Durham.
Brady, Thomas Clarke, Lifford, County Donegal.
Bywater, Robert Turner, Leeds.
Neate, Charles, Maidenhead, Berkshire.
Sutcliffe, William, Hebden-bridge, Yorkshire.
Toshach, James Cummin, South Shields, Durham.

At the same meeting of the Court, Dr. John Barclay passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College.

Military Appointments.—3rd Light Dragoons; Assistant-Surgeon William Green Trousdell, M.D., from the 29th Foot, vice Laing, appointed to the Staff. 9th Light Dragoons: Assistant-Surgeon Wm. Holmes Jephson, M.D., from the 61st Foot, to be Assistant-Surgeon, vice Staunton, promoted on the Staff. 1st Foot: Acting Assistant-Surgeon Robert Beresford Smyth, M.D., to be Assistant-Surgeon, vice M'Nab, appointed to 61st Foot. 29th Foot: Acting Assistant-Surgeon Daniel Macqueen, M.D., to be Assistant-Surgeon vice Trousdell, appointed to the 3rd Light Dragoons. 61st Foot: Assistant-Surgeon Robert M'Nab, M.D., from the 1st Foot, to be Assistant-Surgeon vice Jephson, appointed to the 9th Light Dragoons. Hospital Staff: Assisting-Surgeon Walton G. Leonard Staunton, from the 9th Light Dragoons, to be Staff-Surgeon of the Second Class. Assistant-Surgeon Francis Laing, M.D., from the 3rd Light Dragoons, to be Assistant-Surgeon vice Walter G. Dickson, who resigns.

Naval Promotion.—Assistant-Surgeon John Jolliffe to be Surgeon.

Naval Appointments.—Assistant-Surgeon Benjamin F. Cameron (1850) to the Lucifer steam-vessel, employed on particular service.—Assistant-Surgeon W. H. Cameron to the Albion.—T. G. Harson to the Harlequin.—The promotion of Assistant-Surgeon Ernest Elliott (1841) to be Surgeon, is cancelled at his own request, as he prefers remaining Assistant-Surgeon to the Woolwich division of the Royal Marines.

Obituary.—Nov. 2, at South Molton, after a short but very severe illness, R. E. Tanner, Esq., surgeon, aged 36. Mr. Tanner had been for some years medical officer of a district in the South Molton Union.—On the 14th instant, at Dorchester, Francis Jackson, M.D., aged 43.—On the 15th instant, at Wokingham, Berks, Mr. James Wheeler, formerly surgeon of that place, aged 84.—In Egypt lately, from fever, Dr. P. O'Connor, and Mr. Finnie, surgeon-dentist.

Epidemiological Society.—The meetings of this Society will be held at 53, Berners-street, on the first Monday in every month, from December, 1850, to August, 1851, inclusive. The first meeting is fixed for Monday the 2nd of December, at half-past eight precisely.

Secretary of Lunatics.—The Lord Chancellor has appointed his nephew, (who is also his son-in-law,) Mr. Charles Norris Wilde, secretary of lunatics, an office rendered vacant by the death of Mr. Cartledge. The salary is 800*l.* a year.

Mr. Thistlewayte, deputy-lieutenant for the county of Hampshire, has bequeathed 1000*l.* to the County Hospital, at Winchester; 500*l.* to the Portsmouth, Portsea, and Gosport Hospital; and 200*l.* to the Southampton Infirmary.

Scarlatina has been very prevalent and fatal in Norfolk, especially in Norwich, where the deaths have greatly exceeded the births.

The late Dr. Thackeray has left 1000*l.* to Addenbrooke's hospital.

Professor Oldham has resigned the office of Secretary to the Geological Society of Ireland. He is about to proceed to India, as director of the Great Indian Geological Survey, at a salary of 1000*l.* a year.

Royal College of Physicians.—The following Address to the Queen, from the President and Fellows of the Royal College of Physicians, has been delivered to the Home Secretary for presentation to Her Majesty:—"To the Queen's Most Excellent Majesty:—We, your Majesty's most loyal and dutiful subjects, the President and Fellows of the Royal College of Physicians, in London, desire to approach your Majesty with a fervent expression of our devotion to our Sovereign, and of our unalterable attachment to our Constitution in Church and State. We deem it our duty to offer this expression of our principles and loyalty, in consequence of the aggressive measures of the Roman Pontiff—measures unprecedented in the darkest ages of Papal dominion—whereby he has assailed the supremacy of the British Crown, and has virtually denied the very existence of a Church in this country, or of Christian faith in your Majesty's Protestant subjects. As members of a liberal and highly-educated Profession, we feel ourselves especially called upon to protest against the moral and intellectual tyranny too often exercised by the Church of Rome. Too often has she endeavoured to fetter the human mind with the chains of ignorance; and, looking to the recent interference of the Pope with secular education in Ireland, we see plainly what would inevitably ensue in England also, if he should be allowed to establish here his spiritual power. While we value and respect the rights of conscience, and desire that no civil disability should be imposed on account of religious opinions, we yet demand that your Majesty's authority and the rights of the Church, of which your Majesty is the lawful Head, should be maintained inviolate. Nor can we endure that these should be prostrated before the intolerant pretensions of a foreign power, and of a Church that will not accept of toleration, but claims an absolute and universal sway over the minds and consciences of men. We remember that your Majesty's illustrious ancestors of the House of Brunswick were called to the Sovereignty of these Realms for the express purpose of defending the Protestant faith; and, therefore, we consider a blow aimed at the Royal Supremacy, as directed against the foundation of your Majesty's throne. Although that foundation is laid too deep in the hearts of the people to be shaken by any such attack, yet we humbly pray your Majesty to adopt such measures as to your Majesty shall seem best for the purpose of repelling the aggressions of which we indignantly complain, of preventing their repetition, and of vindicating in the eyes of the world the rights of the Sovereign and of the people of this Protestant land."

The Fellowship.—The following is a copy of the questions submitted to the junior candidates at their examination for the Fellowship of the Royal College of Surgeons, viz.:—1. Find the interest of 324*l.* 8s. 4d. for 4 years and 9 months, at 4 per cent. per annum. 2. If 400 men, working 8 hours a day, are required to do a piece of work in 30 days, find how many men would be required to do the same in 16 days, working 10 hours a day. 3. Required the number, consisting of two digits, together making 10, to which, if 36 be added, the digits will be inverted. 4. Prove that the three angles of any triangle are together equal to two right angles. Also that the exterior angles of any polygon, formed by producing all its sides, each in one direction, are together equal to four right angles. 5. Prove that a straight line drawn at right angles to the diameter of a circle, from the extremity of it, falls without the circle. 6. Prove that there is equilibrium on the inclined plane when the power is to the weight as the height of the plane to its length, the plane being smooth, and the power acting in a direction parallel to the plane. When the plane is rough, find the most advantageous direction in which the power can act, according as the object is to prevent a body from sliding down the plane or to drag the same body up. 7. Prove that in every rigid body there exists a point at which the whole weight may be supposed to be collected without affecting the conditions of the body's equilibrium. What is this point called? In what sense must the proposition be understood, when the point in question falls outside the body? 8. Prove from elementary principles that the pressure sustained by a given small area in the side or bottom of a vessel containing water, depends only on the depth of the area below the surface of

the water, and not on the form or dimensions of the vessel. 9. Explain the action of the siphon. What would take place if a siphon in action were placed under the receiver of an air-pump, and the air exhausted? 10. Enunciate the laws of the reflexion and refraction of light. 11. Explain the construction and functions of the eye, in so far as it may be regarded merely as an optical instrument. Explain the nature of the defects of long sight and short sight, and the reason why they can be corrected by the use of lenses. The candidates were also called upon to translate into English a portion of the works of Cicero and Homer. The professional examination of candidates will take place on Tuesday and Thursday, the 3rd and 5th of December next.

Questions in the Examination for Prizes given by the Society of Apothecaries of London, for the Greatest Proficiency in the Materia Medica and Therapeutics, October, 1850.—1. State the process, and the theory of the changes taking place during the process, of the preparation of potassæ antimonio-tartras. 2. What are the diseases, and what are the doses, and the most beneficial forms of combination, in which this medicine may be administered? State, also, the doses and states of combination with strict reference to those diseases respectively, and to their stages and complications. 3. Enumerate the preparations of opium, and state the quantity of opium each contains. 4. Describe the preparation, and state the theory of the process in the preparation, of potassii iodidum. 5. What are the doses, the uses, and the physiological action of this medicine? State, also, the diseases in which the potassii iodidum is indicated, and the modes of exhibiting and of combining it for those diseases respectively. 6. Give a general view of the modes of operation, or physiological effects, of medicines. 7. Give a physiological classification of medicines. 8. Enumerate the subdivisions of the class, evacuants, and state the several modes in which the sub-class, diuretics, produce their effects. 9. What are the modes in which the sub-class, expectorants, produce their effects?—First prize, gold medal, awarded to Mr. Fk. W. Headland, King's College. Second prize, silver medal, awarded to Mr. D. T. Morris, Charing-cross Hospital.——*Botany.*—Examination paper, Wednesday, August 14, 1850.—1. "Singula quæ Creator Ter. Opt. Max. in globo nostro terraqueo produxit, ordine et nexu inter se cohærent mirabili, et a mutuis officiis conservationem exspectant perpetuam."—*Linn.* Illustrate the above passage, by pointing out the connexions and dependencies of the vegetable kingdom. 2. What are the objects proposed by a natural method? 3. Why is the natural method to a great degree artificial? 4. Describe the structure of the anther in Lauraceæ, Berberaceæ, Ericaceæ, and Epacridaceæ. 5. Describe the structure of the gynæcium of gymnospermous plants. What is our present state of knowledge respecting the fructification and germination of Ferns? 7. Describe the development of the ovary, the embryo, and the anomalous corollas of Ranunculaceæ. 8. "Urit amor plantas."—*Linn.* How far is this true respecting the fecundation of plants? 9. Describe the structure, &c., of the stem and leaves in the specimens numbered 1 to 10. 10. Show the importance of the characters derived from the stem and leaves in the formation of natural orders. 11. Describe the specimens of fructification numbered 1 to 8. 12. Give the reasons for and against the admission of Rhizogens and Dictyogens as distinct classes in the vegetable kingdom. 13. Give the character or characters which distinguish the following natural orders from each other, viz.:—Ranunculaceæ from Magnoliaceæ; Nelumbiaceæ from Nymphœaceæ; Cruciferæ from Capparidaceæ; Meliaceæ from Cedrelaceæ; Xanthoxylaceæ from Anacardiaceæ; Rosaceæ from Myrtaceæ; Umbelliferæ from Araliaceæ; Lobeliaceæ from Campanulaceæ; Verbenaceæ from Labiatæ; Apocynaceæ from Asclepiadaceæ; Lauraceæ from Thymelaceæ; Myricaceæ from Betulaceæ; Zingiberaceæ from Cannaceæ. 14. Enumerate the principal medical products of the above orders. There are three prizes given by the Society—1. A gold; 2. A silver medal, with books on botanical science; and 3, books only. The successful competitors were—First prize, Mr. Frederick William Headland, King's College; Second prize, Mr. George D. Brown, St. Thomas's Hospital; Third prize, Mr. John Z. Lawrence, University College.

Royal Westminster Ophthalmic Hospital, Charing-cross.—Mr. Gardiner Guthrie, one of the surgeons to this hospital, and assistant-surgeon to the Westminster, performed the operation of amputation as for the hip-joint, on Saturday morning last, for the removal of a very large tumour of the right thigh, on a gentleman from the country, who came up to Mr. Guthrie, senior, for the purpose, knowing that he had successfully performed this operation. He being a druggist, Mr. Guthrie extended to him the kindness of taking him into a private room he has for decayed gentlemen and others in the Ophthalmic Hospital. The case was seen, and the operation approved of, by several members of the Council of the College, who were present on the occasion, particularly by Mr. Arnott, the President, Mr. Travers, Mr. Stanley, and Mr. Bransby Cooper, and several other distinguished hospital surgeons. Chloroform having been first administered, the soft parts were rapidly divided, with great dexterity and coolness, and the bone, according to arrangement, sawn off at the trochanter. While the vessels were being secured, Mr. Stanley undertook to ascertain whether the tumour, which was evidently malignant, had implicated the bone,—which, if it had done, the head of the femur was then to have been removed; but, as he was led to believe that the bone was not diseased, after sawing it through in three or four places, it was allowed to remain. Mr. Gardiner Guthrie's colleague, Mr. Hancock, compressed the artery against the pubes, with perfect success, while Mr. Canton held the limb. The patient this morning, Thursday, has eaten a good breakfast, and is doing well. We shall give full particulars of this interesting case next week.

HEALTH OF LONDON DURING THE WEEK.

The mortality of London, which rose in its weekly sum considerably above 900 at the end of October, when a sudden fall of temperature was experienced, has again declined, but only to a small extent, during the succeeding period, in which the thermometer, as regards the mean value of its indications, has nearly recovered its former position. In the last three weeks the deaths have been successively 945, 921, and 908. Taking the ten weeks of 1840-49, which correspond to that ending last Saturday, the average number was 991; and, if this be increased in the ratio of probable increase of population, it becomes 1081, compared with which the 908 deaths registered last week show a decrease of 173. In the present return, consumption is fatal in 125 cases, which is rather below the corrected average; more than 100 of these occurred amongst persons between 15 years of age and 60.

MORTALITY TABLE.

Deaths in the week ending Saturday, Nov. 16, 1850.

(Metropolis.)

Causes of Death.	Nov. 16. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	402	323	183	908	9906
Specified Causes	398	322	183	903	9865
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	146	47	16	209	2287
Sporadic Diseases:					
Dropsy, Cancer and other Diseases of uncertain or variable seat	4	22	12	38	505
Tubercular Diseases	48	108	11	167	1646
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	36	33	31	100	1139
Diseases of the Heart and Blood-vessels	4	20	11	35	317
Diseases of the Lungs, and of the other Organs of Respiration	78	41	29	148	1722
Diseases of the Stomach, Liver, and other Organs of Digestion	15	19	19	53	607
Diseases of the Kidneys, &c.	...	9	3	12	78
Childbirth, Diseases of the Uterus, &c.	...	7	1	8	118
Rheumatism, Diseases of the Bones, Joints, &c.	...	4	1	5	75
Diseases of the Skin, Cellular Tissue, &c.	1	...	1	2	16
Malformations	4	...	...	4	24
Premature Birth and Debility	28	...	...	28	202
Atrophy	18	1	...	19	145
Age	...	...	38	38	591
Sudden	5	1	6	12	116
Violence, Privation, Cold, and Intemperance	11	10	4	25	277
Causes not Specified	4	1	...	5	41

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Nov. 16, 1850.	Sum of Ten Weeks.
London...	1948369	908	9906
West	301189	135	1439
North	376568	167	1822
Central...	374199	170	1810
East	393067	212	2150
South	503346	224	2685

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	34	Heart	31	Phthisis	125
Bronchitis	70	Hooping-cough	27	Pneumonia	56
Cholera	0	Hydrocephalus	25	Scarlatina	39
Childbirth	5	Influenza	1	Small-pox	13
Convulsions	23	Liver	12	Stomach	4
Diarrhœa	20	Lungs	8	Teething	7
Dropsy	8	Measles	24	Typhus	56
Erysipelas	7	Paralysis	20	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	787	435	352
Females	794	473	321
Total	1581	903	673

METEOROLOGY OF THE WEEK.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Means / SUM
Electricity.*	No electricity was shown during the week.							
Rain in Inches.	0·00	0·00	0·00	0·00	0·00	0·00	0·09	SUM 0·09
Amount of Horizontal Movement of the Air.	Miles. 190	205	70	70	55	100	145	SUM 835
General Direction of Wind. P.M.	W.S.W.	W.S.W.	N.	W. & N.	N.	S.W.	S.W.	S.W. & N.
General Direction of Wind. A.M.	S.W.	W.S.W.	W.S.W.	Calm.	N.	Calm.	S.	S.W. & N.
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 8·0	+ 7·8	+ 6·0	— 3·7	— 5·2	— 5·4	+ 4·6	+ 1·7
Ditto. Dew Point.	50·1	48·1	41·0	37·5	32·8	33·8	46·3	41·8
Mean of Thermometer. Dry.	53·7	53·1	50·8	40·6	38·8	38·4	48·3	46·2
Mean of Barometer.	30·103	29·952	29·897	29·897	30·099	30·120	29·935	30·000

Day.

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications for publication have been received from—

Mr. Lawrence, Mr. Bransby Cooper, Professor Owen, Dr. Letheby, Mr. Haynes Walton, Dr. Venables, Dr. Gavin, Mr. Holmes Coote, Dr. Kirkes, Mr. Hunt, Mr. Austin Bankier, of H.M.S. Alligator; Staff-Surgeon Dartwell, Fort Pitt; Mr. Taylor, Mr. Whitling, Dr. Parker, Dr. Prior, Dr. Rooke, Mr. Markwick, Dr. Snow Beck, Dr. Jenner, Mr. Campbell, Mr. R. Ward, Dr. Maund, Dr. Tunstall, Mr. Milton, Dr. Butler Lane, Mr. Harvey Holl, and others.

Our anonymous Correspondents must permit us to acknowledge the receipt of several letters for publication without further particularising their writers.

The following Publications have been received:—

Asiatic Cholera. By Henry Mudge, Bodmin. Pamphlet, pp. 12.

New York Journal of Medicine. New Series. Nos. 1 and 2.

On the Structure of the Spleen. By W. Sanders, M.D. Reprint from "The Annals of Anatomy and Physiology."

Introductory Lecture at the Calcutta Medical School. By Allan Webb, M.D. Calcutta. 1850.

Case of the Child William Bell, an Inmate of the Poor-house of Dunfermline. Pamphlet, pp. 26. W. Clark, Dunfermline. 1850.

The Therapeutic Application of Electro-Magnetism in the Treatment of Rheumatic and Paralytic Affections. By Professor Froriep, of Berlin. Translated from the German by R. M. Lawrance, M.D. Renshaw, London. 1850.

Monthly Journal of Medical Science. For November, 1850.

Brighton and its Sanitary Resources. By Edwin Lee. Pp. 120. Churchill, London. 1850.

Pharmaceutical Journal. For November, 1850.

Vital Statistics of the Town of Margate. By Edward Mottley. Revised Edition. Pamphlet, Pp. 24. Keble, Margate. 1850.

On the Containing-Texture of the Blood. By William Addison, M.D. Reprint from "Medical Gazette."

American Journal of Medical Sciences. For October, 1850.

Chemistry. By George Wilson, M.D., F.R.S.E. Pp. 316. W. and R. Chambers, Edinburgh. 1850.

Memoir of John Carter. By the Rev. W. J. Dampier. Pp. 44. Parker, West Strand, London. 1850.

Address to the American Medical Asscciation. By John C. Warren, M.D. Pp. 65. Wilson, Boston. 1850.

Deafness Practically Illustrated. By James Yearsley, M.R.C.S.E. Third Edition. Pp. 244. Churchill, London, 1850.

Guy's Hospital Reports. Vol. VII., Part 1. Pp. 271. With Engravings. Churchill, London. 1850.

Pathological Society Reports. Session 1849—50. Pp. 297. With Engravings. Bentley, London. 1850.

Surgical Report on Bi-lateral Lithotomy; with General Remarks on Operation for Stone. By J. Nottingham, M.D., &c. &c. &c. Pp. 101. Churchill, London. 1850.

Notice of an Unpublished Manuscript of Harvey. By G. L. Paget, M.D., Fellow of Caius College, Cambridge, &c. &c. Pamphlet. Pp. 20. Longman, London. 1850.

On the Use of the Speculum, &c. By Robert Lee, M.D., F.R.S. Reprint from "Medico-Chirurgical Transactions."

The Surgeon's Vade Mecum. By Robert Druitt, F.R.C.S. Fifth Edition, much improved, and illustrated with 175 highly finished Wood-cuts. Pp. 600. Renshaw and Churchill, London. 1850.

Operative Surgery. By Frederick C. Skey, F.R.S. Pp. 709, with many Woodcuts. Churchill, London. 1850.

We hope next week to review Sir B. Brodie's work on the Joints.

Our apologies are due to Dr. Davies, of Bath. We hope to publish his letter on Pericarditis next week.

Mr. Ebsworth's paper on "Pauper Practice," and Dr. Hutchinson, on the "Diagnosis and Treatment of Consumption," are in type.

We have seen the letter of *Fido*, and the note appended by the Editor. The "Medical Times" refused to be the organ of a party, or of a section of a section of the Profession, and, therefore, the "Institute" was established. Our desire being to advance the Profession, as one body, in dignity, honour, and usefulness; to see goodwill and kindly feeling restored; to heal those wounds it has been the aim of some to widen, it was with feelings of no small disgust that we read the cases 1 and 3, at page 155, of the "Institute." Men who strive to set one class of the Profession against another, to exalt one section by holding up another to contempt, are as unworthy of the hand of fellowship as they are of the support of the Profession. We would advocate the interests of the smallest as warmly as we would those of the largest section, animated in either case by the same principle, viz., a desire for the good of all, and a conviction that no one section can be injured without the whole body medical suffering. The "Institute" says, that it advocates the cause of the General Practitioners because they constitute the largest class; we support their claims because we believe those claims to be founded in justice.

Cupidus Discendi.—The paper will be published immediately.

A Subscriber will, perhaps, refer us more particularly to the case; we may then, perhaps, be able to obtain the information he requires.

An Irish M.D.—We wish our correspondent would relieve us of the task of replying to all the questions put to us—answers to many of which could be obtained with great facility from instrument and bandage makers. We referred our correspondent to Dr. Waller, who has given the subject much consideration, and who, we are sure, will reply to any question put to him.

Will *Philo* favour us with his name and address.

Mr. Wardrop on the Heart.—We are happy to inform our readers that we have received a parcel of MS. from Mr. Wardrop, with the intimation that it completes his work. This has been printed, and the proofs sent to the Author. As soon as it has received his corrections, it will be prepared for distribution. Gentlemen, therefore, wishing to receive the pages will be so kind as to inform the publisher, to whose care in London they shall be forwarded.

The great length of our report of the discussion on Ovariotomy at the Royal Medical and Chirurgical Society obliges us to omit this week much that we had intended for the present Number of the Journal. Among matters of minor importance, Mr. J. Wilson's long letter, and Mr. Mackern's short one on Homœopathy, with some remarks of our own upon them, must stand over.

Quousque Tandem.—The letter we have received is personal and anonymous, and therefore unfitted for our pages. Although its facts are probably true, their publication would be libellous. Our correspondent should have sent his name, not, of course, for publication, but for our own satisfaction.

ORIGINAL LECTURES.

CLINICAL LECTURES ON SURGERY,

AT

ST. BARTHOLOMEW'S HOSPITAL,

October 17, 1850.

By W. LAWRENCE, F.R.S., etc.

ON CYSTIC TUMOURS; THEIR FREQUENT CONNEXION WITH DISEASED VESSELS, AND DEVELOPMENT FROM CONGENITAL NÆVI.

I removed, Gentlemen, last Saturday, from the thigh of a young man, a patient in this hospital, a large oval, congenital tumour, in which the morbid appearances discovered after the operation are of considerable interest, as illustrating its connexions and mode of development. They may also assist in explaining an unexpected occurrence which you all witnessed during the operation, namely, profuse venous hæmorrhage from a vessel divided in the separation of the tumour from the subjacent parts.

CONGENITAL CYSTIC TUMOUR OF THE THIGH.—OPERATION.—UNHEALTHY CONDITION OF THE WOUND.—RECOVERY.

Case 1.—J. H., aged 17, a light-complexioned, healthy-looking lad, had been the subject since birth of a small subcutaneous tumour in the upper part of the left thigh. It had given him no pain, and had attracted but little attention; he was unable to give any further history of it than that he had noticed a knot in the groin as long as he could remember, and that it had slowly increased in size. He consulted a surgeon, who, feeling fluctuation in a prominent part, punctured it and let out some pale yellow, watery fluid, with but little diminution in the bulk of the tumour. Admitted into the hospital October 2, 1850.

There is an oval tumour, measuring between three and four inches in the long diameter, between two and three across, lying over the crural arch, extending equally on the aponeurosis of the external oblique muscle, and on the thigh. It is covered by loose and healthy integument. The lower and anterior two-thirds have a soft and fluctuating feel. The upper and outer part is of firmer consistence, as it is made up of enlarged glands. It has a defined boundary, but, though somewhat movable, its deeper connexions are uncertain.

As the tumour was increasing in size, the patient wished to have it removed, and I accordingly performed the operation, October 5, chloroform having been previously administered. From a preliminary puncture into the softer part there escaped only a small quantity of yellowish fluid, of watery consistence. I then proceeded to denude the tumour, and in so doing first opened one cyst, then a second and a third. The last, situated at the lower and inner part, was of considerable size, and contained at least two ounces of fluid. The lining of these cysts was smooth and shining, but crossed by irregular elevations and bands; they extended deeply towards the crural arch, and were adherent to the subjacent structures in the immediate vicinity. Continuing the dissection towards the under surface of the tumour, I accidentally cut into a large vessel in the situation of the femoral vein, and there issued forth a profuse stream of venous blood. The wound in the vessel was longitudinal, and so long that it was necessary to seize it with two pair of forceps, in order to the effectual application of a ligature. The bleeding immediately stopped, but it was remarked that around the ligature the vessel swelled up into a pouch as big as the end of the thumb, like a thrombus. After this occurrence it would have been obviously unsafe to pursue the dissection deeper in the same direction.

The morbid growth had been already separated from the aponeurosis of the external oblique as far as the crural arch, where the harder portion had a deep and firm connexion to the femoral vessels. On cutting through this, it was found to be an enlarged and hardened gland, of which the portion remaining behind was so closely adherent to the vessels, as to render the attempt to remove it inexpedient. When the principal mass of the swelling had been thus taken away, portions of several cysts opened in the course of the operation were left behind, particularly the principal part of the larger one covering the femoral vein, and extending three inches along the inner side of the limb. These I did not hesitate to leave, satisfied that they would inflame and granulate. The edges of the incision were brought together with sutures, and the wound was covered with water-dressing. When the sutures were removed in twenty-four hours, no union had taken place, and the wound presented a considerable excavation, especially towards the inner part of the thigh, from which there was discharged in abundance a fluid of watery consistence, tinged with blood. In the course of a few days the discharge became thicker, from an admixture of pus. For about a week there was no unfavourable appearance; but, at the end of that time, the lower side of the wound and the adjacent part of the thigh swelled very considerably, the skin becoming red, hot, and painful; a similar change to less extent took place above, and to the outer side of the limb. The surface of the sore was disorganised, tawny, and without the slightest appearance of granulation; the discharge thin and acrid. Charcoal poultice and better diet were now ordered, with little or no benefit. Indeed, the wound was becoming deeper, the surface more unhealthy, and the surrounding inflammation more considerable; and the integument had sloughed at one part to a small extent. The state of the wound, in short, was decidedly that of hospital gangrene. The pulse was accelerated, but weak; the skin hot; there was loss of appetite and rest, with great sense of weakness. It was now determined to remove the patient to another ward, as in that where he had hitherto lain, although well ventilated and not crowded, some cases of hospital gangrene had occurred, when the diseased showed itself in the hospital in 1847, having then begun in the same month as on the present occasion. The liquor cinchonæ cordifoliæ was freely administered, with port wine and nutritious diet. The wound, which was very deep at its inner side, was kept carefully cleansed from a thick mixture of offensive secretion and disorganised tissues, and then covered with strips of lint, dipped in balsam of Peru. The benefit of these changes was obvious in twenty-four hours in improved appetite and rest. The inflammation and swelling soon abated; the surface of the wound became clean, and secreted healthy pus; the strength and feelings improving daily. A considerable inflammatory swelling took place on the inner side of the thigh, from which perfectly healthy matter was discharged on puncture, and continued to flow abundantly. At this time (November 1) the entire wound is nearly cicatrised.

The tumour, which has been carefully examined, consists of various sized cysts, connected by healthy reticular and adipose tissue, its boundary being rather indefinite. The surface of the opened cysts is irregular and broken; the lining membrane smooth and glistening, and marked by numerous orifices, which resemble the mouths of veins. Some large venous trunks have been dissected out and traced into the cavity of the cysts. Here is one, into which a piece of bougie has been introduced; the vessel opens directly into a cyst, and the walls of the latter are obviously continuous with the walls of the vein. The fluid contained in some of the cysts was found to consist of albumen, water, and altered blood-discs. Other cysts directly continuous with the veins were empty, but doubtless contained blood. It has been suggested that the hæmorrhage may have proceeded from one of these cysts, which, of more recent formation and deeper seat, yet maintained a communication with surrounding vessels. To me, it appeared that the bleeding came from the femoral vein, either swelled into a kind of pouch, or considerably larger, and with thinner coats than in the natural state.

CYSTIC TUMOUR ON THE NECK AND FACE.—OPERATION OF EXCISION FOLLOWED BY ERYSIPELAS.—RECOVERY.

Case 2.—Alice L., aged 3½, a healthy-looking, fair-complexioned child, was admitted into the hospital with a congenital tumour, situated in the upper part of the neck, on the left side, where it extended from behind the pinna of the ear to the chin, stretching over the angle and base of the lower jaw on to the face, nearly as high as the zygoma, constituting a conspicuous and great deformity. It was noticed of small size soon after birth, and has increased slowly but steadily, having been in great measure neglected, as it caused no inconvenience. It had now attained a magnitude rendering it necessary that measures should be adopted for its diminution or removal. The greater part

of the mass was soft and yielding, with an obscure fluctuation, but in the face, near the angle of the jaw, there was a solid mass, the size of a pigeon's egg, not unlike an enlarged gland.

The tumour, of which the outline was irregular and the boundary indefinite, was covered by perfectly healthy integument, which could be pinched up in folds; but at one spot, just behind the ear, the skin was thinner than elsewhere, and the fluid came nearer to the surface. The extent of the growth at its basis was uncertain, especially behind and below the angle of the jaw, but nothing unusual could be seen or felt from the mouth. There had been no pain from the commencement.

June 16, 1849.—Chloroform having been employed, which speedily produced insensibility, an exploratory puncture was made in two situations with a lancet, and there escaped, with slight diminution in the size of the part, some transparent clear fluid from both openings. A crucial incision having been made over the mass, I proceeded to expose it by turning back the flaps of integument, and to detach it from the parts beneath. It proved to be a collection of cysts, occupying the subcutaneous tissue of the face and neck, and burrowing deeply in the direction of the large vessels, so that the carotid artery was exposed, and seen pulsating for some distance. During the dissection, I opened a large vein, which bled so freely as to require a ligature. I then cut off the most prominent part of the tumour, leaving behind many open cysts, not only around the large vessels, but on the exposed surface generally, entertaining no doubt of their subsequent obliteration. The edges of the divided integument, having been partially approximated by sutures, the patient was put to bed, and soon recovered from the effects both of the chloroform and bleeding.

The case went on as favourably as could be expected until the 22nd, when the edges of the wound, and all the surrounding parts, were of bright red colour, and extremely painful. There was, at the same time, severe constitutional disturbance, with total want of rest, so that for several days there appeared little chance of recovery. At last free suppuration occurred, and the wound, which had opened extensively, then granulated and cicatrised.

July 24.—She left the hospital nearly well.

The growth was found to consist of numerous cysts containing fluid, either perfectly limpid and watery or of yellowish hue, in every specimen of which, a portion consisting of fibrine coagulated spontaneously when allowed to stand in a small vessel; the rest threw down a precipitate of albumen, upon the addition of acids or the application of heat. Under the microscope there were discovered, especially in the fluid of yellowish hue, numerous blood-discs; some whose outline was sharp and well defined, others jagged and irregular. There was a considerable quantity of granular matter, probably disintegrated blood-discs. Here, then, was obviously a collection of serous cysts containing blood, which, from rest and other causes, had lost its red colour, but was in other respects natural. The solid part of the tumour was a spongy mass of dark red colour, made up of a congeries of tortuous vessels, which, after pursuing a certain course, became dilated with thinned walls and were lost among the cysts. Mr. Coote, to whom I gave the tumour, with directions that it should be carfully examined, informed me that it appeared to have been a subcutaneous nævus, in which portions of the veins, which were all dilated and tortuous, had, from pressure and other causes, been isolated from the rest of the tubes, and then distended into cysts, by the abundant secretion of a thin fluid, which, poured forth from the vascular cyst walls, mixed with the blood still remaining in the obstructed portion of the vein.

CYSTIC TUMOUR ON THE LEFT SIDE OF THE TRUNK.—OPERATION.—PLEURISY.—DEATH.—EXAMINATION OF THE TUMOUR.

Case 3.—Robert O—, aged 8, a healthy-looking dark-complexioned boy, was admitted into the hospital under my care Feb. 6, 1850, with a circumscribed congenital tumour, occupying the right side of the body over the inferior ribs. It was soft, doughy, and compressible, and communicated to the hand a sensation similar to that of a large subcutaneous nævus; but pressure did not decrease its bulk, and the integument covering it, which was quite healthy, did not exhibit any of the vascular ramifications which are usually seen over a nævus. It had never caused pain. Although small at first, it had now attained the size of a common cheese-plate.

The parents being desirous that something should be attempted to relieve the child from a growth which was now of considerable size, and had increased of late rapidly, I performed the operation February 9. I made a crucial incision through the integument, and reflected back the flaps, with the intention of strangulating the tumour by ligatures carried through its base, in the event of its proving to be a nævus. The tumour, however, proved to be a collection of cysts, of various sizes, with smooth internal surface, bearing a close resemblance to the serous coat of veins. They contained fluid of yellowish red colour, which, though thin, was obviously altered blood. The growth was intersected by numerous vessels, chiefly veins, which, however, did not appear to have any direct communication with the cysts. Profuse hæmorrhage followed each stroke of the knife, and the boy became faint from loss of blood. The boundary of the tumour being undefined, and the cysts having been freely exposed, it was deemed best for the patient, in his exhausted state, to cut off the principal mass of the disease, and tie the bleeding vessels. He soon rallied, and went on favourably until February 28, when he was seized with an attack of acute pleurisy, which terminated fatally in the course of a few days. The body was examined by Mr. Kingdon, the house-surgeon, who found the right pleural cavity lined by soft recently-effused lymph, and distended by serous fluid, in which floated numerous yellow flakes of fibrine; the layer of lymph was thickest just opposite that spot where the operation had been performed, and the muscles denuded. There were some few cysts detected under the integuments, extending towards the axilla; in all the lining membrane was thick and rough, and had secreted healthy pus.

SUBCUTANEOUS NÆVUS, COMPOSED CHIEFLY OF VEINS, SITUATED UPON THE ABDOMEN.—OPERATION.

Case 4.—I was consulted by Mr. H., aged 20, a delicate-looking and slightly-made youth, December, 1845, respecting an oblong subcutaneous tumour, measuring one inch in its long, and about half an inch in its short diameter, situated upon the front of the abdomen, over the inferior ribs in the right side. The patient stated that he noticed it first about four years ago, in consequence of some uneasiness in the part, caused by the pressure of the braces. It had since increased slowly. He had been under the care of a surgeon who had endeavoured to destroy it by caustics, but without effect.

It was of firm consistence at the base, but the rest of the swelling was soft, the integuments being thin and of bluish colour from distended vessels, which seemed to constitute the great mass of the tumour. They could be emptied by slow, firm, and continued pressure, and they refilled slowly when the pressure was relaxed.

It was extirpated December 6, 1845. The hæmorrhage was inconsiderable: one small artery alone was tied. Upon examination, it was found to be composed of small cysts, containing a yellowish-red fluid, which, under the microscope, proved to consist of granular matter and altered blood-discs, with jagged outline, floating in a thin serous fluid. Coloured injection, composed of gelatine and vermillion, introduced through the cut orifice of a vein, readily filled the whole tumour, proving the continuity of the cysts with surrounding vessels and with one another.

The edges of the wound, which were brought together by suture, united by adhesion, and the patient left town well in a fortnight.

LARGE VASCULAR SWELLING IN THE MOUTH, WITH SMALL CONGENITAL NÆVUS IN THE INTEGUMENT OF THE LOWER LIP.—OPERATION.

Case 5.—A man of spare habit, 58 years of age, was admitted into the hospital in April of the present year. The left half of the lower lip and neighbouring portion of the cheek were swelled, as if from a large substance in the mouth. Midway between the edge of the lip and chin there was a livid nævus of circular figure, rather less in diameter than a shilling, and consisting of vessels, apparently venous, closely arranged. By everting the lip the patient brought into view a swelling between two and three inches in diameter, so large as to fill the opening of the mouth. It was soft and yielding, and covered by healthy mucous membrane. Venous trunks of some size were seen ramifying near the surface. It could be emptied completely by pressure,

which reduced it to flaccid mucous membrane; it refilled quickly when the pressure was removed. The nævus on the lip had existed in a stationary condition from the time of birth. The swelling in the mouth had commenced five years ago, and had increased rapidly of late, so as to become extremely inconvenient by its bulk. It had never pulsated, and was quite free from pain.

A strong ligature was passed through the base of the swelling after it had been emptied by pressure, and the two portions of the thread were tied firmly round the corresponding parts of the swelling. The mass beyond the ligatures was then shaved off by the knife. It was found afterwards that the strangulation was not complete on the side, and some bleeding took place. But the principal part of the substance included by the ligatures sloughed and separated, after which the surface granulated, and was closed by a firm cicatrix, the inconvenience and deformity caused by the swelling being completely remedied. After the application of the ligatures, the external mark on the lip disappeared. When they were removed, the vessels were refilled, and the former appearance was reproduced.

Examination of the Tumour.—It was a soft spongy mass, loosely connected to the mucous membrane. Vessels and nerves passed through it to surrounding parts. The arteries pursued their course, unchanged in structure or diameter; but the veins soon degenerated, their walls became thin, then split into shreds, and the cavities thus dilated formed, with surrounding veins similarly altered, a congeries of irregular cysts communicating with each other. There was a soft spot on the most prominent part of the tumour; this was found to be a cyst of larger size than the rest.

NÆVUS IN THE COURSE OF TRANSITION TO THE CELLULAR STATE.

Case 11.—In the autumn of 1848, I removed from the chest of a child, two years of age, a small tumour, partly solid and partly vascular. It had ceased to enlarge at the circumference, but the vessels, tortuous and with thinned walls, were becoming more prominent, and assuming the form of cysts.

Upon examination after extirpation, it was found to be composed of veins, which, after pursuing a short course, became much dilated, and eventually formed cysts. In many situations the continuity with the vessel was completely cut off. The more recent cysts contained nearly pure blood; others contained a yellowish fluid, composed of fibrine, albumen, and altered blood-discs mixed with a large proportion of water. The older cysts contained a limpid fluid, composed of water, albumen, granular matter, and cholesterine.

In all the cases of cystic tumour now brought under your notice, the disease was either congenital, or of so long duration that the patient could not remember its commencement. In this respect they resemble nævi.

The smooth internal surface of the cysts, in the three first cases, was more like that of veins than any other structure; while their firm texture, irregular dilatations, and partial constrictions, presented just such an appearance as might have been expected in veins which had undergone dilatation, and then lost their connexion with the corresponding trunks. The venous origin thus assigned to these cysts is not an explanation of mine; *non meus hic sermo:* I merely set before you the conclusions deduced by Mr. Coote, whose industry and accuracy you are well acquainted with, from a careful examination of the parts removed in the cases now related. Indeed, the first case afforded the direct proof of a vein opening into one of the cysts. The several stages of transition from the condition of the veins, as seen in nævus, to the growths which seem to be a mere congeries of cysts, are exhibited in the Cases 4, 5, and 6.

Perhaps the most satisfactory proof that these tumours are of vascular origin, lies in tracing the gradual change of the healthy veins into the cystic formations. Just as we observe in cystic sarcoma of the mammary gland, where the lactiferous tubes become dilated into pouches, some as large as a walnut; so do veins yield, under certain circumstances, to the pressure of the fluid which they contain; their walls become thin; the vessel itself is rendered tortuous; pressure on surrounding parts produces morbid adhesions, and thus, in course of time, we have isolated portions of the canal under an appearance which, on first view, presents nothing of venous character. Examination of the fluids contained in the cysts affords additional evidence of their venous origin. In some, there was pure blood; in others, the fluid was dark coloured, but thinner than blood; in others, it was of reddish yellow, or strawcoloured; in the majority of the cysts it was limpid and watery; but yet in every specimen it contained albumen and the remains of blood-discs; and in a few there was found fluid fibrine, which coagulated spontaneously upon being allowed to stand for a few hours.

One or two practical points require attention. Although these cystic formations are superficial, being covered only by skin and the immediately subjacent tissue, they may extend more deeply at their base, becoming involved with important vessels and other parts. Thus, in Case 1, the cysts were spread over the femoral vessels, and in Case 2 over the carotid artery and adjacent parts. Hence, in operating, caution is necessary when we come to such situations. Under such circumstances, the cysts cannot be completely removed; nor is it necessary to attempt such removal, either in such places, or in other parts of the exposed surface, as the portions left behind inflame, suppurate, and granulate. The exposed surface of the cysts shows the same disposition to inflammation as we observe in the lining of healthy veins; hence the local inflammatory symptoms are considerable, and accompanied with much constitutional excitement.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE X.

The Special Pathology of Tuberculosis Continued.—The Pathological Anatomy of the Mucous Membranes: In Children.—The Pathological Anatomy of the Mucous Membrane of the Stomach; of the Intestinal Canal; of the Small Intestines; of the Large Intestines; of the Urinary Organs; of the Bladder; of the Urethra; of the Vagina—General Remarks on the Pathology of the Mucous Membrane in Tuberculosis.

In continuation of the pathological facts relating to tuberculosis, upon which ultimately I intend to found my nosological arrangement of tuberculous affections, I proceed with the morbid appearances

OF THE STOMACH.

This organ was healthy in one-fifth only of the cases of tuberculosis pulmonalis examined after death by Louis. It was sometimes of a more or less bright red colour, partially thickened, mammillated, softened, attenuated, ulcerated, or destroyed. There was softening, with attenuation of the mucous membrane in about one-fifth of the cases, its usual seat being the upper part and fundus. Sometimes there was redness and thickening with mammillation, being coated with thick, tenacious mucus, the result of inflammatory action; or there was redness and softening of the fundus, sometimes with small ulcerations. Louis demonstrates the effects of inflammation, but thinks they are sometimes the result of chemical action, and that inflammation frequently sets in during the latter days of life, as in the pleura and lungs. There was mammilation, with greyish or reddish discoloration not attributable to mechanical causes, and ulceration was met with in about 1-12th of the cases. The ulcers were from one to eighty in number, but generally few. In every case but one the mucous membrane retained the same thickness, consistence, and colour, around as between the ulcerations. In 400 cases he never found grey granulation or yellow tubercle, either in the substance or beneath the stomach. Rokitanski states that tubercle and tuberculous ulceration are very rare and primary tuberculosis of the stomach almost unknown. Tuberculous ulcers generally extend from the ileum, through the jejunum and duodenum to the stomach, and are then generally limited by the pyloric portion, but sometimes extend to the fundus.

In 96 cases Louis found the stomach :—

Attenuated	19	times.
Red and somewhat thickened, mammillated and softened on the anterior surface	8	„
Softened, and of a dull or brownish red colour at the fundus	17	„
Mammillated, greyish, sometimes reddish thickened	19	„
Ulcerated, without any other change	2	„
Softened, without alteration of colour or thickness	4	„
Of a more or less bright colour over the entire suface, without alteration of consistence or thickness	6	„
Raised up by a viscid liquid	1	„
Presenting the appearance of cicatrization	1	„
	77	„

Thus, in a great proportion of the most inveterate and fatal cases of tuberculosis, the signs of inflammatory action in the stomach are unequivocal and severe, yet the deposit of tubercle is at most a very rare occurrence,—a circumstance which goes far to dissociate the local production of tubercle from the inflammatory process. The morbid appearances above described are met with in other chronic diseases in the proportion of perhaps one half the cases, whereas in tuberculosis they occurred to Louis in four cases out of five. Rilliet and Barthez found inflammation and softening of the stomach a common occurrence in tuberculous infants, and softening was especially frequent in those who died of meningitis ; but they regard the latter circumstance, in the greater number of the cases, as a *post-mortem* effect.

OF THE MUCOUS MEMBRANE OF THE INTESTINAL CANAL.

The deposit of tubercle occurs much more frequently in the mucous membrane of the intestinal canal than in any other part of the mucous membranes, but there is reason to believe that the ulcerations which are met with here, as elsewhere, being the result of tuberculosis, are not always produced by the deposit of tubercle. At all events, in a great proportion of instances, they leave no vestiges of the specific anatomical element. They are the result of the ulcerous diathesis of the disease, and analogous to the ulcerous tendency exhibited in external scrofula. The digestive tube exhibits a remarkable tendency to chronic inflammation and all its consequences, and these affections are of the more importance, since upon them frequently depends the rapidly fatal result. The local affections of the lungs oppose obstacles to the assimilation of air, and the local affections of the intestines oppose obstacles to the assimilation of aliment ; hence, both respiration and primary assimilation are arrested.

Tubercle is for the most part deposited in the submucous tissue, and more frequently in the small intestines than in any other part of the intestinal canal. The deposit occurs in the form of crude tubercle and soft yellow granulations. In the first case, the submucous cellular tissue is preserved, giving the tubercle a harder consistence. In both cases, the character of the tubercle is precisely the same as in any other part of the body.

Lebert's account of an attentive examination of the changes which occur in a portion of the mucous membrane of the intestine, in which tubercle has been deposited, is as follows :—

The membrane is found, at first, to be perfectly sound, then slightly raised by the aggregation of tuberculous matter, and it is not until subsequently, that it becomes injected and softened. Ulceration ultimately occurs, and this, as in other parts of the body, is the effect of the presence of the foreign body. When ulceration is established a thickening takes place in the surrounding tissue, which increases in proportion as it extends. The submucous cellular tissue and the muscular coat participate in this thickening, and thus oppose a barrier to perforation of the intestine.

Deposit of tubercle in the digestive canal occurs in every degree, from a few disseminated tubercles to the most extensive aggregation. Lebert once found a single tubercle along the whole intestinal canal, with a series of tuberculous ulcers from the commencement of the ileum to the rectum. This pathologist never met with the semitransparent grey granulation in the digestive tube, and appears to doubt its occurrence. Other pathologists have left no doubt upon the subject. I lately examined a case in which its existence was unequivocal.

Lebert thus describes the microscopic view of the detritus which covers tuberculous ulcers of the intestine—it is a mixture of cylindrical epithelium and shreds of mucous tissue ; around the detritus, circles of vascular injection present themselves, and sometimes the lymphatic vessels appear to be filled with tubercular matter. Tubercle in the intestines undergoes softening, disaggregation, disorganisation of its corpuscles, and final destruction, just as in other parts of the body.

The ulceration progressing, the borders of the ulcers become broken, and as it were lacerated, and present a reddish brown, and sometimes a blackish tint, the latter being partly produced by the sulphuretted hydrogen gas, or the acids of the intestinal canal, and partly by melanotic deposit, which will be described on a future occasion.

The occurence of tubercle in the intestines is one of the most common pathological effects of tuberculosis; it is met with in a great proportion of the cases of phthisis; but affections of the intestinal mucous membrane, independently of the deposition of tubercle, are equally common.

The most minute and accurate account extant of the pathological appearances of the intestinal canal is however that by Louis. Although the observations were made on adults only, and in but one form of the disease—tuberculosis pulmonalis—yet, as nearly all the fatal cases of tuberculosis exhibit tubercle in the lungs, and thereby come under the designation of phthisis, Louis' observations for the adult admit of general application.

IN THE SMALL INTESTINES.

Softening was very common, but not more so than in other chronic diseases, it generally implicated the whole tract of the canal, and in some cases thickening and bright-red discoloration co-existed with the softening. In many cases the intestine was red throughout its entire length ; in others, redness was limited to a small portion. Hard semicartilaginous granulations were accumulated in great numbers, and scattered throughout the entire tract, or in patches, and, always seated under the mucous membrane, never occupying the interstices of the muscular fibres. Tuberculous granulations, succeeded by ulcers produced by the same process as ulcers in the lungs, were seated in the interstices of the fleshy fibres, and between the peritoneum and the muscular coat. Of 120 cases, tubercular granulations occurred in 54. In several cases, small grey granulations were found associated with the tuberculous granulations. Ulcerations of the small intestines presented themselves in 5-6ths of the cases, being about twice as frequent as tubercular deposit. The number, size, and depth of the ulcerations increased the nearer the cœcum they were observed. They almost always occurred opposite the mesentery in the situation previously occupied by Peyer's glands, which were completely destroyed. Sometimes small abscesses, about the size of a pea, were developed in the submucous cellular tissue. The ulcerations pretty frequently entailed marked contraction of the gut around them.

IN THE LARGE INTESTINES.

The morbid results of tuberculosis are the same in nature here as in the small intestines. Softening was of very frequent occurrence; the entire tract of the colon, and even of the whole length of the bowel, was red in a great proportion of cases. The redness and softening frequently rendered the consistence of the tissue no greater than that of mucus. The membrane was thickened in several cases, and ulcerated in the greater number. It presented a mammillated appearance, and was destroyed in a tolerably large number of cases. Louis refers the softening with redness to inflammation. The cause of softening without redness he considers doubtful. Tuberculous granulations were present in about 1-8th of the cases. In 120 cases, tubercle was found in eight cases only ; thus it was much less common than in the small intestines ; ulceration was, on the contrary, almost an equally common occurrence in both portions of the tract. The mucous membrane was rarely perfectly sound. Of 108 cases, there were only 20 in which ulceration was not discernible. With the exception of the deposit of tubercle, all the morbid appearances of the large intestines are found after other chronic affections, but by no means so frequently.

Condensing Rokitanski's description, the following appear to be the essential features in the pathological anatomy of tuberculosis intestinalis. Tubercle aggregated in the intestinal mucous membrane, and by extension in the deeper seated coats, is a most important variety of the disease. In adults it occurs rarely, in children more frequently, as a primary form. It occurs more frequently as secondary to the deposit of tubercle in the lungs, taking place after the latter has assumed the suppurative stage. It is frequently chronic, but oftener acute. In the chronic form the tubercle is originally deposited in the mucous membrane and submucous cellular tissue; there is no perceptible inflammatory action; it appears as grey transparent granulation, which softens at its centre, and is gradually converted from within outwards into the yellow cheesy tubercle; it appears to be blended with the mucous membrane, and projects into the intestinal tube in the shape of a sessile hard nodule.

In the acute form there is considerable inflammatory action; the tubercle is first deposited in the cavity of Peyer's glands, then into the solitary follicles, and lastly, in every other part of the intestinal mucous tissue; it appears in large masses, and in the shape of yellow cheesy matter; the surrounding tissue is extremely congested, and suppurative and ulcerative destruction are speedily effected.

Tuberculous deposit in this situation is for the most part the result of fully developed tuberculosis; softening is effected with great rapidity, the mucous membrane gives way, the tuberculous matter escapes, and a cup-shaped ulcer results; its margin is firmly attached, rounded, and indurated, of a pale or red colour, in proportion to the reaction in the surrounding tissue; its base is formed by the condensed cellular layer, or by the granulated textures of the parietes of the dilated follicles; the increase of the ulcers takes place with more or less rapidity, and it loses its original form to exchange it for a more characteristic secondary one.

The increase of a tuberculous ulcer in the intestine is effected just as in the lung,—by fusion of the tubercular infiltration of the margin, and by concurrent suppuration of the tissue. In the first place, small adjoining ulcers coalesce into one of larger size, the common base presents sinous projections of the common margin of mucous tissue; the margin of the enlarged ulcer is sinous or dentated, inverted, and tumid, and is formed of mucous membrane of light red colour; but this is infiltrated with transparent gelatinous substance analogous to the gelatinous infiltration of pulmonary abscesses. The base is formed of callous cellular tissue, and underneath this, the remaining intestinal layers are condensed and tumefied. At the margin and at the base, there is deposition of grey, or, more commonly, of soft yellow tubercle.

Rokitanski's description of the further progress of these pathological changes is most interesting, and highly indicative of the inveterate character of the morbid condition of the blood in these cases. The tuberculous ulcer may extend in depth as well as laterally. Secondary deposition of tubercle may take place equally into the callous cellular tissue of the base; and, as it fuses into this point, into the muscular and subserous layers also; the peritoneum may become perforated from suppuration or mortification. When the peritoneum becomes inflamed, a fibrinous exudation results, which is replaced by tubercle, and adhesions are formed with neighbouring organs.

The healing process in intestinal tuberculosis is also most instructive. The first indispensable condition is the cessation of all secondary tuberculous infiltration at the margin or base of the ulcer; the callous base is then condensed into a fibro-medullary cord, and the edges of the ulcer approach each other. This process sometimes advances so far, that the dentated edges almost touch, and between them a whitish callous cord may be observed; occasionally the edges are soldered together over the callosity, yet so as to leave a fissure at one end of the ulcer, and in rare cases an entire consolidation is effected. By contraction of the ulcers, a cicatrix on the surface is promoted, which presents a more or less tumid edge on the internal surface of the intestine; and if the ulcer be of considerable size, or if it encircles the entire intestine, a callous annular ridge remains, which diminishes the calibre of the intestine. The cure of an intestinal tubercle is always accompanied by a diminution of the intestinal calibre.

It may be here stated, that Cruveilhier, on examining an adult subject, in which the lymphatic vessels were filled with tubercle, traced one of these vessels throughout the length of each villus, as far as the *ampullæ of Lieberkuhn*, which was filled with tubercular matter. (a)

In infants and young children almost the only species of tubercle detected by Rilliet and Barthez in mucous membranes was the miliary tubercle and yellow granulation; grey granulation and semi-cartilaginous tubercle were very rare, and they scarcely met with yellow infiltration. Tubercles are for the most part deposited under the mucous membrane, between it and the muscular coat, and sometimes in the mucous follicles. In children they never attain a large size, and they soften with the greatest facility, leading to perforation and ulceration; the ulceration always tends to spread, and the tuberculous matter is rapidly eliminated and carried away with the contents of the mucous canal. When this has occurred the ulceration alone remains; and these gentlemen make the important remark, that its tuberculous character may frequently be overlooked. In infants, also, it is a very rare circumstance to find tubercles progressing from the external or free surface, and perforating the subjacent membranes. Rilliet and Barthez detected tubercles in the mucous membrane of the gastro-intestinal canal only; but ulceration, without evidence of tubercular deposit, is frequently met with, as in the adult, in other parts of the mucous tract.

According to the researches of Drs. Friedleben and Flesch,(b) inflammation and disorganisation of the intestinal mucous membrane, without tuberculosis, are more common in infancy than in adult life. As a result of tuberculosis, inflammation of Peyer's glands and of the solitary glands are generally of simultaneous occurrence, and are accompanied with deposition of tubercle in the spleen, but not in the intestinal canal. They consider the non-occurrence of intestinal tuberculosis one of the most prominent characters of the pathology of the intestinal mucous membrane in infancy.

In individuals who die of tuberculosis, non-tuberculous ulcerations are much more frequent than ulcers proceeding from tubercle. Louis found ulceration above ten times more frequently than tubercular granulations, and in 120 cases of ulcerated large intestines, tubercles were found only eight times. MM. Rilliet and Barthez observed tubercles and tuberculous ulcerations in the gastro-intestinal membrane in 141 infants, according to the following proportions:—(c)

In the stomach	21
„ small intestines	134
„ large intestines	60
„ three parts simultaneously	11
„ stomach alone	„
„ small intestines alone	71
„ large intestines alone	7
„ stomach and small intestines alone	10
„ stomach and large intestines alone	„
„ small and large intestines alone	42

The 21 *Diseased Stomachs exhibited*—

Extensive disease	2
Less extensive	4
Disease of small extent	15
Ulcerations	20
Tubercles	7
Tubercles with ulcerations	6
Tubercles without ulcerations	1
Ulcerations without tubercles	14

In 134 *Diseased Small Intestines*—

Extensive disease	50
Considerably diseased	14
Disease of small extent	70
Ulcerations	121
Tubercles	82
„ with ulcerations	70
„ without ulcerations	12
Ulcerations without tubercles	51

In 60 *Diseased Large Intestines*—

Extensively diseased	10
Considerably diseased	18

(a) Anat. Path. avec Planches, liv. ii.
(b) *British and Foreign Review*, July, 1848, from Henle in Pfeufer's "Zeitschrift," Vol. V., Heft. 3.
(c) "Maladies des Enfans, Tom. III., p. 437.

Disease of small extent	32
Ulcerations	57
Tubercles	15
„ with ulcerations	10
„ without ulcerations	5
Ulcerations without tubercles	47

THE MUCOUS MEMBRANE OF THE URINARY ORGANS.

Like the respiratory and intestinal mucous membrane, this is frequently the seat of chronic inflammation, and of muco-purulent discharges, and of ulceration, in individuals predisposed to tuberculosis; which affections are sometimes associated with other external tuberculous diseases coming under the designation of scrofula. This membrane is also occasionally the seat of tubercle, which, as in the respiratory and intestinal mucous membranes, is less frequent the nearer it approaches the external surface. Rokitanski thus describes tubercle of the urinary mucous membrane:—"The earlier stages and the chronic course are marked by grey millet-sized granulations in the sub-mucous cellular tissue, which speedily become yellow, soften, and, after perforating the mucous membrane within a ring of re-active inflammation, give rise to small circular ulcers, which but rarely enlarge to the dimensions of a pea or a bean. When the disease is more acute, the mucous membrane is attacked in larger sinous or annular patches; or becomes infiltrated throughout with the tubercular product of inflammation, which is at once detached as a cheesy purulent mass; the membrane is superseded by a thick, yellow, fissured, and purulent layer, the external cellulo-fibrous portion of which presents a lardaceous character, the calibre of the canal being enlarged. In the parts which are free from the tubercular deposit, numerous aphthous erosions, resembling those described as occurring in the larynx, are frequently observed.

Rokitanski believes that tubercle of the urinary mucous membrane is usually extended from the genital organ, in which it occurs primarily.

OF THE BLADDER.

Tubercle of the mucous membrane of the bladder is a very rare occurrence; Louis found it in two cases only out of 200. When it occurs it is commonly associated with tubercle of the urethra and prostate gland; it assumes the form of discrete granulation only, and is deposited with more or less reaction and vascularity; it softens, breaks through the mucous membrane within a circle of vessels, and forms a small roundish ulcer. The cervix and fundus are its usual site. In one of Louis' cases the mucous lining of the bladder was completely destroyed.

OF THE URETHRA.

Rokitanski states, that tubercle and tuberculous ulcerations occur in the urethra only in conjunction with tuberculosis of the entire urinary apparatus. Rayer gives a case of a man, aged 31, who had also tubercle in the kidneys, the testicles, &c.; and another of a boy, aged 12 in whom they occurred over the entire length of the urethra, associated with tubercle in the kidneys, peritoneum, &c.

Ricord(a) mentioned a case of an individual, 58 years old, in which the whole mucous membrane of the urethra was infiltrated with a multitude of miliary tubercles, some of which were aggregated, softened, and ulcerated. A large tuberculous abscess existed in the prostate gland, and, some years previous to death, a tuberculous testicle was removed from the same patient. The symptoms were those of obstinate gonorrhœa. M. Ricord has met with but one other instance.

OF THE VAGINA.

Even in extreme cases of the most complicated tuberculosis the vagina is rarely affected with tubercle. M. Raynaud gives a case, which Louis quotes, where softened tuberculous matter flowed from the uterus, the interior of the cervix being lined with a stratum of tubercle, and a multitude of ulcerations were detected in the vagina. The ulcers were much more numerous at the posterior than at the lateral parts of the canal, and there were none on the anterior surface. This corresponds with a similar occurrence, so frequently observed in the trachea and upper parts of the air passages, in which Louis attributes the ulceration to the action of the discharge. In a case where the uterus was tuberculated without any suppuration, there were no ulcers in the vagina.

(a) *Medical Times*, April 20, 1850, p. 296.

It is most important to study this ulcerative and suppurative tendency of tuberculosis as respects the skin and the whole mucous surface together. Taking the descriptions of various pathological anatomists, how essentially identical is the process of tuberculous ulceration in the larynx, trachea, bronchi, intestinal canal, and urinary mucous membrane, and can there be a doubt that the scrofulous ulcer of the external surface and the tuberculous ulcer of the mucous membrane are essentially the same, allowing for differences of organisation, different periods of life, and consequent maturity or immaturity of the blood disease. Tubercle is rarely deposited in the skin, and so is it rarely deposited in those mucous membranes which have closest access to the external air—the upper part of the respiratory canal and the lower parts of the urinary organs. The skin is extremely liable to tuberculous ulceration—that is to say, ulceration of a peculiar character, depending upon the morbid state of the blood—without the deposit of tubercle. So are the mucous membranes. The erosions which occur in the larynx, trachea, vagina, and urethra, are the analogues of the slight cutaneous eruptions of scrofula. The problem to be solved is, why should the external surface be most liable to the affection at one period of life and the mucous membranes at another? and, also, why is the deposition of tubercle so much more frequent an occurrence in the internal mucous surfaces than in the skin and the terminal mucous membranes? Pathology does not at present satisfactorily account for these circumstances. The analogy between the symptoms, progress, and termination of an ulcer in a tuberculous subject where there is no separate and distinct manifestation of tubercle, and an ulcer which obviously proceeds from previous tubercular deposit, whether in the external or internal organs or surfaces, is also obvious. This will be more striking when the pathology of the lymphatic glands in tubercle is before us.

We have shown the defective cell nutrition in every degree and form of tuberculosis, but it is nowhere more remarkably illustrated than in the case of a solution of continuity or ulceration of the dermoid and mucous tissues. The blastema from which these tissues have to be renewed, and in which cellular tissue, blood vessels, and epidermis or epithelium is to be produced, being defective, organic cells are imperfectly formed; hence union by the first intention is defeated, granulations are imperfect, and pus is vitiated. The chronic character and intractability of scrofulous and tuberculous sores are thus accounted for. Where the blood is tuberculous, that is to say, possessing the qualities I have described, its fibrine being deficient, its albumen vitiated, its watery element increased, its vitality diminished, could it be expected, *à priori*, that the granulations in a sore, if they form at all, would be firm, or that they would contract after the manner of granulations produced from the blastema exuded from healthy blood?

[To be continued.]

ORIGINAL COMMUNICATIONS.

A CASE IN WHICH SUDDEN DEATH FOLLOWED THE LONG-CONTINUED USE OF CARBONATE OF SODA.

By JAMES TUNSTALL, M.D.,
Physician to the Eastern Dispensary, Bath.

On the evening of the 5th September, I was walking near the York-house, when my attention was directed to a man who had just fallen down on his back; I immediately attended. The heart ceased to beat under my hand, the eyes were flattened and glazed, the limbs extended,—the man was dead.

I subsequently obtained the following history of the deceased, who was a tall muscular man, 53 years old, a millwright by trade, and of temperate habits.

About eighteen years since he first began to complain of severe dyspepsia for which he was advised to take a small quantity of the bicarbonate of soda; when necessary, this quantity he had gradually increased until he took half a hundred weight yearly, or rather more than two ounces daily, for sixteen years. During this period, he had two

severe and long-continued fits, the last five years since, when he remained cold, insensible, and passive, for nearly thirty minutes. He had been travelling for twenty-four hours previously to his death by a stage wagon, had alighted for the purpose of inquiring his way, and, while in the act of speaking to his daughter, fell dead. He had dined five hours before, and had drunk half a pint only of beer; had taken several doses of soda on the road, more than a pound of which was found in his pocket when the body was searched.

The case was so clearly one of sudden death that my evidence was not required at the inquest, which was held on the following evening. My friend, Mr. George Goldstone, surgeon, of Bath, having told me of the deceased's habits, it was resolved that we should both attend, and, if possible, obtain a *post-mortem* examination; this was peremptorily refused; but, by dint of persuasion, we at last obtained permission to open the abdominal cavity only. I mention this fact, because it might be supposed that we ought to have given the full morbid appearances; but I think we are at all times justified in considering the wishes of survivors; and, therefore, when we obtain permission to examine a portion only, we are bound in honour to abstain from any further inquiry.

Externally the body was blanched, and upon making an incision little cellular or adipose tissue was met with; the muscles were pallid, resembling veal after bleeding; upon opening the abdomen the stomach was discovered enlarged to twice its natural size, occupying the whole of the superior third of the abdominal cavity; its peritoneal surface was covered with reticulated blood vessels, and a bright brick-red blush, commencing with the cardiac extremity, extended over one-third of its surface. Upon opening it the whole mucous membrane was found disintegrated and pulpy. Numerous ulcerations, varying in size from a pea to a large bean, were scattered throughout, so that its appearance was like that of a polished tortoise-shell. During its removal from the body, which was carefully done by Mr. Goldstone, its coats gave way to the extent of three inches, leaving a rough edge; the stomach contained half a pint of a strong acid fluid, with portions of meat in a partially digested condition; the small intestines presented similar appearances to those found in the stomach, and there was little or no fat in the omentum.

The liver was contracted in size and consolidated, as was the spleen.

It has never fallen to my lot, either in public or private practice, to find a stomach so extensively diseased as the one now under consideration. I may be allowed to hazard a few speculations upon the cause of death in this very singular case.

I was inclined, at the first view, to believe that it had arisen from nervous apoplexy, but this idea was negatived by the fact, that up to the moment of his death he had been in conversation with his daughters, and that death was instantaneous and complete: there was no evidence of a rupture of the heart or great vessels, for I counted three distinct pulsations under my hand; so that I think we may safely affirm, that the fatal attack was one of syncope, produced by the attenuation of the circulating mass by the long-continued use of the alkali.

That a great analogy exists between the effects of long-continued alkaline remedies and scurvy is well pointed out in Pereira's "Elements of Materia Medica," where, speaking of liquor potassæ, he says, "it appears in the highest degree probable, that scurvy, and the effects caused by the long-continued employment of the alkalies, are analogous conditions of system.

Carbonate of soda has, within the last few years, become almost an established article of diet of daily consumption in our tea, and for the purpose of neutralising the acidity of malt liquors; so that, apart from the curiosity excited by the present case, I am anxious that its relation should have a practical importance; that it may be taken with supposed impunity, in large doses, for a period of sixteen years, the present case testifies. We have a laborious artisan, never complaining of severe illness, taking what he supposes to be an innocent remedy for dyspepsia, and who, no doubt, had he complained of illness, would not have thought it of sufficient importance to mention, as his daughter did at the inquest, until Mr. Goldstone suggested the question to the Coroner.

It not unfrequently happens that we are consulted by persons labouring under severe dyspeptic symptoms, in whom many of the peculiar symptoms of scurvy are present, the swollen and bleeding gums, flabby condition of the muscles, and general anæmic condition; for this we are at a loss to account; apparently the diet is all that we can desire, and the patient well nourished.

But let us pursue our inquiry still further, and we shall find that the ordinary diet is of an alkaline character. The volatile alkali is used largely by the bakers for the preparation of fancy bread, while soda is used to a great extent in biscuits, cakes, &c.; a portion of soda is added to his tea morning and evening; while, should his malt liquor be at all hard, soda is added to diminish the acidity; and the cook throws a lump of soda into the pot to make his vegetables assume a green colour. I will here say nothing of the soda water which forms a large portion of the drink of the richer dyspeptic. I have said enough to show that we all unconsciously adopt an alkaline debilitating diet, attenuating the blood and predisposing to cachexia.

Physiology has shown that a proper digestion of the food requires a proportion of free acid in the stomach, and this being neutralised by the exhibition of an alkali, either in the food or as a medicine, digestion is interfered with. The stomach is perpetually engaged in the secretion of acid. The acute mind of the late Dr. Prout enabled him to observe that the long-continued use of alkalies caused, as a first result, an increased secretion of gastric acids, leading to diseases of the hepatic and renal systems.

It is seldom that we have opportunities of verifying, by *post-mortem* examination, the physiological effects of apparently innocuous articles. I have looked in vain for a similar case among those recorded in the works on medical jurisprudence; but I think I have not occupied the time of the meeting unnecessarily, in bringing under their notice a case which shows, that, in addition to the functional disorder induced by the long-continued exhibition of the alkali, severe and fatal structural disease was the ultimate result, it being not a little remarkable that the enlightened views of Dr. Prout, in reference to the production of a morbid acid secretion, should have been so fully verified by the *post-mortem* examination. That a long-continued course of alkalies may produce a beneficial result, the case which I am now about to relate offers striking proof, and forms, I think, a good pendant to the one above related.

A gentleman, 50 years of age, who had suffered twenty years from hydrocele, which had been repeatedly tapped and injected, was advised, in 1840, to take twice daily ten drops of liquor potassæ, for dyspeptic symptoms. In a short time he found his hydrocele diminish perceptibly in size; he took the medicine regularly for five years, and became completely cured. I saw him a few days since, when he informed me that he had had no return whatever of the complaint.

These two cases, I think, are interesting enough to be put on record, since it is only by the accumulation of parts that medicine takes rank as a progressive science.

PAUPER PRACTICE.

By ALFRED EBSWORTH, Esq., M.R.C.S.

(Continued from page 250.)

MIDWIFERY.

The adage, that "poverty makes us acquainted with strange bedfellows," is never more fully exemplified than in pauper midwifery practice. At one moment, we may be sitting comfortably by our own fire-side, contemplating the busy habits of a domesticated wife, or the playful gambols of a child just bursting from the trammels of its infant existence into the vigour of pristine intelligence; in another moment, we may be upon our road, cold and damp, to the abode of vice and wretchedness, where neither bed nor board, nor vestige of social existence can be seen, to wait and watch over the parturient woman whose pains cannot bring forth, from sheer exhaustion, the product of her womb, —whose pains will keep you waiting through a long night and half a day before you be released, to commence the yet unperformed duties of your office. Although one experiences a pang at leaving home and fire, and wife and child, yet with what satisfaction we return to all, when we have saved a woman from impending death, or at least been the

means of providing a temporary relief to her wants. The greatest difficulty we meet with in pauper midwifery is the absence of clean linen, such as sheets, blankets, &c., &c. For instance, a woman in poor circumstances is almost always confined in her day-clothes. Now, this results, not from habit in her, but necessity; she does it to save the only sheet, or the only covering she has, from being soiled,—for, after she has been confined, the other members of her family are obliged to lie in the same bed. Now, it has always been my endeavour to establish in every parish a Dorcas Society, to meet this want; but, unfortunately, the Dorcas ladies will not lend the linen to women who have illegitimate children, so that the worst class of cases are unprovided for. I would not encourage immorality,—I would establish a difference between the comforts of a married and an unmarried woman in childbirth; but I cannot conceive how it is that the latter should be handed over to perdition by the clergy and the matrons in her time of trouble. She is shunned as a firebrand in the village—she is made an outcast—the consoling voice of religion is withheld from her in her sickness,—and she is not thought worth saving, as far as her spiritual wants are concerned. From this neglect arise one or two important facts in pauper practice. The pregnant unfortunate commits the sin of procuring abortion in the early months, or else, after the child is born, it becomes her study to destroy it by violence, or in the more secret way, by inducing repeated colds, or by withholding the natural milk secretion. In whatever way its death is effected, certain it is, that in workhouses and poor districts the mortality of illegitimate infants is frightful to contemplate, and it is beyond the power of the medical officer to stop it. I shall relate one or two cases now, in which abortion and flooding have been produced by the introduction of instruments into the womb. These are interesting cases, as showing the danger of any interference with the uterus whilst in an impregnated state, and, at the same time, the impunity with which abortion may be produced in some women by the old stagers who infest the manufacturing districts and towns.

I received an order to attend, late at night, a young girl, aged 19, with violent uterine hæmorrhage; she was lying with her face from me, and she covered it with her hand and was frequently sobbing. On examination, I found the bedclothes saturated with blood; cloth after cloth had been removed, and the patient was almost anæmic; she could scarcely bear the slightest manual examination, but I made a sufficient one to ascertain that the uterus had been evacuated of its contents. There was extreme pain about the parts, and the shyness with which every question I asked was answered, made me suspect foul play, so I requested all her relatives to leave the room; she then confessed to me that she had led an irregular life in a large town, and, passing her regular menstrual period, she had feared impregnation, and had gone to an old woman, who passed an instrument up her person; she bled very much at the time, but was told she would be all right in time. Upon this she came home, and the result was the hæmorrhage and miscarriage. It is singular to witness in these cases, except the girl is on the point of death, with what pertinacity she screens the authors of her sufferings. No inducement, no threat, no fear, will compel her to divulge the secret, and hence in England is established a traffic which would disgrace the annals of any European state to record.

The next case which I have before me was a woman who had previously had illegitimate children, and about the fifth month of impregnation I was called to attend her for miscarriage, attended with violent flooding; the child and afterbirth had been discharged, but the uterus did not contract regularly. I applied the usual remedies, and left her out of immediate danger; but puerperal fever set up in a few hours, with extreme tenderness of the uterus, and she died. Circumstances afterwards were brought under my notice, which fully convinced me, that in this case she had herself thrust a wire through the walls of the uterus, thus giving rise to the terrible inflammation which destroyed her. Such a case can only be treated as an ordinary case of miscarriage; in fact you are seldom if ever made aware of the reason of its coming on; the women themselves will tell you a dog flew out upon them, or that they have done it by lifting or taking too long a walk. You may perhaps diagnose a case of this description; first, by noticing the manner of the patient and learning her course of life,—ascertaining from her friends whether she has been away without their cognizance; secondly, by discovering a much more painful condition of the uterus than we observe in cases of ordinary abortion; and, lastly, by our gentleness of disposition towards and kindly expression of interest in her, we may perhaps worm out the real state of the matter from her own lips; and it would be our bounden duty, if we can, in every case to track out the abortion procurer, and drive her to the scaffold or the prison.

But very dangerous uterine hæmorrhage is frequently brought under the Union surgeon's notice, unconnected with any external violence, and we have a case of the following description:—

Mary Mather summons you by her mother to attend her with flooding; she lives close to your residence. You are shown, on entering the room, one or two pots full of blood; the floor has been mopped, for the flow has gone through all the bed-clothes, and perhaps is running down the steps leading to the chamber. On the bed lies a young married woman perfectly blanched, and only occasionally giving a sign of life by a deep sigh. Menstruation, the mother says, has disappeared for two months and a half, or three months. Well, what is to be done; you are at the case as soon almost as the accident has occurred, so had every advantage. Just attend to the state of the patient, examine the external parts, and see if there be any hæmorrhage going on; if so, you must examine the uterus at once. Give the patient plenty of fresh air, a little weak brandy and water, and bandage her lightly, to give support to the abdomen and uterus. You should examine then the discharged blood carefully, and see if you can discover the ovum by itself or contained in an oblong pulpy substance like liver more than anything else. You distinguish a clot by its easily breaking down under the finger, by the smoothness of its surface, and the absence of stringiness. The ovum may be discharged *per se* in the interior of the secundines, or the after-birth may remain whole or in part in the uterine cavity. The most severe form of hæmorrhage in the earlier months results from a small knuckle of placenta remaining behind, firmly attached to the fundus of the uterus, and to effect a separation of this small particle is not so easily accomplished, for the vagina and uterus are comparatively in a contracted state, rendering the passage of the fingers into the vagina and uterus very painful and hard to bear by the patient, who, on every attempt, begs you to desist from every effort to scrape it away from its position. As soon, however, as this small portion is removed, danger from flooding is very rare, for the uterus contracts instantly, and constricts the vessel which gave rise to the hæmorrhage. In the treatment of severe hæmorrhages, whether from the uterus, the nose, the stomach, or the intestines, how inefficient does the Union surgeon find the means at his disposal to rouse the sinking energies of his patient; how difficult it is for him to procure nicely-made beef-tea or broth, or to provide a cupful even of palatable gruel. It is true, he can recommend the patient to have wine and meat, but how can the parties in attendance reduce the latter into a sustaining dish, where there is neither fire, nor cook, nor pot or pan to digest it in? I have very frequently seen patients almost lost for want of support, with as nice a piece of beef as one would wish to see within their very grasp. Some will take a pound of mutton, and make broth of it by merely scalding it with boiling water, and then tell you they cannot relish it; others will what they call "frizzle" what they want before the fire, and, after swallowing a mouthful, the stomach rejects the solid morsel; in fact, in debility it is of no use to give meat in its raw state. I sometimes get this sent into a neighbour's of respectability to make good palatable broth of, and then the patient gets sufficient nourishment; but, where such good Samaritans are not at hand, it would be well if the Poor-law Commissioners would sanction the establishment, in large towns or villages, of a sickness kitchen, where, upon a surgeon's order, beef-tea of the very best quality, gruel, and fever drinks could be obtained ready made, and merely requiring heating when it arrives at the patient's bed-side. I am sure a much less amount would be expended in sick relief than at present, for it stands to reason, that, if a patient is badly nourished in the early stages of disease, when nourishment is most needed, the absence of it will cause a long and protracted recovery, which would have been otherwise effected in half the time. The same observation, too, applies to bedding. How frequently does it happen, that our worst cases of fever, or, in fact, any other disease, lie on the bare floor! Now, would it not be policy for each parish, or each Union district, to have five or six beds, bedsteads, and appurtenances

placed at the medical officer's disposal, which he could remove to the patient's house at once? Instead of this, to save the patient from dying like a dog, he must remove him in an uncertain conveyance to the poorhouse or to the hospitals at the risk of the man's life; for it is very evident that, except from the extraordinary poverty of the man, he would not be disturbed from his position.

Another difficulty also arises in the treatment of our cases,—namely, the nursing. Sometimes we see a wife lying in a dying state, and only a husband, who is engaged from six in the morning to six at night, to wait upon her. It has been my lot to see the fatigued husband lying by his dead wife. Or, we have an ignorant mother, through her ignorance, neglecting a delirious child; or we have a young child waiting upon parents who both lie upstairs with typhus. It is my opinion that any expense incurred in strengthening the hands of medical officers would be amply repaid in the long run. If one father of a young family could be saved by a good cook or a good nurse, it would save the maintenance of a widow and children for a long series of years, and would make them respectable members of society, instead of innate thorough-bred paupers. It may be objected, that now we can have nurses found for our cases;—it is not the quantity, but the quality of this species of assistance I am arguing for.

Complications of disease with labour are frequently met with in Union practice, and I give the following cases, which may be interesting.

Sarah Bennett, when she spoke to me to attend her in labour, was rather flushed in the face and restless; she said she had six weeks to run. I attributed her appearance to mental uneasiness; but in the evening of the same day, I was summoned to attend her with flooding, which she attributed to a constant short cough, which had come on since I saw her in the morning. There was not at first a great deal of bleeding; but she said her pains came on regularly, and she should be sure to go on; I therefore waited. Soon a pain came on, then a large clot of blood was discharged, dark and venous. I examined the os uteri: it was very high up, and I fancied I detected a piece of placenta protruding through it as she coughed; on a second examination I could no longer find the placenta. The case went on gradually, the woman lost a good deal of venous blood before she was delivered, and I remained in attendance twenty hours. She got over her trouble satisfactorily, and the child was dead. On examining the placenta, it appeared that one half had been completely dissected from the uterus, whilst the other remained naturally attached, giving sufficient support to the child, which had been felt in the early hours of labour. The detached portion was filled with clotted blood, and contrasted strangely with the clear surface which was detached at the latter end of the birth. Now, on the second day the patient was doing extremely well; but I was called to her in the evening, saying that she had milk fever and an eruption. On passing my fingers over the surface I detected an elevation of the cutis, for it was dark, and I suggested small-pox, but was laughed at by the matron. By the light of next day, small-pox it proved, and the incubation had given rise to the cough, &c. &c. This woman had confluent small-pox, delirium, inflammation of the lungs, a separation of the cuticle from the palms of the hands and soles of the feet, superseding upon violent flooding, and recovered safely and well in three months, the human constitution being able to withstand so manifold a series of attacks. In such a case as this, the greatest attention to cleanliness is required; the fetor is abominable, and the patient will surely sink into low fever unless the linen undergo repeated ablutions. A complicated case of this sort costs the parishes a great deal of money, in nursing, food, raiment, and washing; but it is the medical man's duty to see the patient through her trouble, without caring how many ounces of soap are consumed in washing, or how much meat has brought her round.

Maude Matthews, five months gone, became ill with irritative fever; an erysipelatous blush appeared upon her nose, spread over her head, down her back, shoulders, arms, &c. During the delirium which accompanied the progress of the disorder, without a pain apparent to the woman in attendance, she gave birth to a dead child, which was found pushed to the bottom of the bed, with the after-birth attached. The case did well. In the treatment of the erysipelas, it was found necessary to give hyd. c. cretâ to affect the gums. Could this have affected the condition of the uterus in any way so as to cause it to throw off its burden? or would the determination of blood to the external surface so far abstract the vital fluid from the child, and render its habitation to the mother a source of further danger? With reference to the treatment of erysipelas of the head and face, I find nothing more efficacious than the application of argent. nit., in the proportion of twenty grains to an ounce of water. This solution I apply, wherever the inflammation spreads, with a camel's-hair pencil. Mr. Higginbottom, of Nottingham, first recommended this invaluable remedy, and I have never seen an instance of its failure. I do not dread the application of lead lotion to the head as long as the heat is intense; but, as soon as this is lowered, I tell the patient's nurse to warm it slightly, so as to make it agreeable to the patient's feelings.

Puerperal mania is one of the most frightful diseases attendant upon labour. I received an order to attend Ann Barnes some time previous to her confinement. She evinced symptoms of derangement, and wandered about from house to house, neglecting her duties, and never sleeping. I was in hopes, when her confinement took place, her malady would disappear. I gave her morphia; at first half a grain, then one grain, and at last she took six grains a day without the least symptom of sleep. One night the husband came to me, saying he thought his wife was about to be confined. I went immediately, and found the woman sitting on the hearth without a fire, a pool of blood lay on the floor, the child lay naked on a chair, the cord had been broken by the woman's own hand, and the placenta was thrown on the fire-back or cinders. No persuasion would tempt her to go up stairs; she had risen, whilst her husband had been for me, from her bed, and, with only an animal's instinct, had performed the offices of nature in an animal-like form. Now, in cases of puerperal mania, the sooner you get the patient into the asylum the better, for she is no longer safe to be at large. Everything connected with home irritates her; her husband, perhaps as good a man as needs be, is ruining her or her children, and driving all into the workhouse; or she one day takes up her infant and dashes its brains out. The patient above mentioned did go to the asylum; there she was orderly, a good needlewoman, and, in fact, an invaluable servant to the establishment. She appeared so far recovered as to be fit to be discharged. She came home with money provided from the charity,—her husband received her in a clean, tidy home, and her children welcomed her; but she had not been home six weeks before her former symptoms returned with aggravation, and I was compelled to send her back; and in the asylum she will remain, an incurable lunatic. I believe, if maniacal symptoms remain after delivery, that no medicine is of avail.

Puerperal convulsions I have met with in the following cases, amongst others:—

Jane Butler, a sempstress, aged 19, advanced to the full period of pregnancy, of gross habit, was seized with the most frightful convulsions I ever remember to have seen. She was surrounded by innumerable female relatives and friends, keeping the fresh air from her, and poisoning the atmosphere in the contracted chamber. I followed the usual routine, and bled the patient to a pint; then gave half a dozen calomel and opium pills, and if the os uteri had been low enough, should in all probability have ruptured the membranes and induced labour; but I was saved all trouble. On my visit the first thing next morning, I was surprised to find the woman delivered, the child dead, and everything, even the patient, right. The mother told me that in the night the girl showed one pain and the child was born; she had not time to send for me. The rules laid down for the treatment of puerperal convulsions do appear to me to be out of all character; a woman already insensible is to be rendered still more so by opium; she is to be saturated with mercury; she is to be cupped, and bled, and leeched, and she is to have the rude hand of the accoucheur thrust into the uterus, and the child severed from the mother by main force!

In my other cases I have watched attentively the progress of the malady, and now never resort to the above disgusting processes. I find it only necessary to keep the patient quiet, to give a mild purgative or a clyster, apply cold to the head, at most a few leeches, and I rub the back and uterine region with chloroform liniment, made with equal parts of chloroform and liniment saffron. I believe this remedy, applied locally, to be of the greatest service, and tends to relieve the irritation which gives rise to the head symptoms. I may be

wrong in my supposition, but experience daily convinces me of its intrinsic worth in puerperal convulsions.

I shall conclude the present article by impressing upon those who accept Poor-law appointments, the necessity of paying attention to all women labouring with child. There is not a moment or an hour but a case of danger may occur; there is not a place more unfitted than another in which the parturient woman may not be found. I would urge the medical man to unite his efforts with the neighbouring ladies to provide linen for those in childbirth, and to have means for providing nourishment ready at his hand. The comfort with which you surround a woman contributes to her safety, and a good word from the lowest may lead you to a patient who is better off than herself; but as far as I can see this does not always hold good,—I therefore speak advisedly. My experience tells me, that persons in a little better station than the pauper, and residing in the same locality, almost invariably call in another medical man, not connected with the Union; they like him, perhaps, but are afraid that his visits will be looked upon as parochial; hence I have known a man who has resigned a berth of this description, spring at once into a good practice. The same holds good with vaccination; if a man accepts a contract to inoculate paupers, there is good-bye to his ever getting a respectable fee for the same. The better class go off to another practitioner, as it is not respectable to go to Mr. So-and-so, who has so many dirty children at his surgery.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	November 30.	Medical Society of London. *Subject*:—Dr. Cormack on a Case of Cauliflower Excrescence from the Os Uteri, &c. Eight o'Clock.
——	——	Guy's Hospital Physical Society. Eight o'Clock.
Monday,	December 2.	Epidemiological Society. First Meeting. Half-past Eight o'Clock.
Tuesday,	December 3.	Linnæan Society of London. Eight o'Clock.
——	——	Pathological Society of London. Eight o'Clock.
Wednesday,	December 4.	Geological Society of London.—*Subjects*:—1. Major Vicary, E.I.C.S., on the Geology of the Upper Punjaub and Peshawur. 2. Mr. R. Harkness on the Silurian Rocks and Graptolites of Dumfriesshire. 3. Report on the Coal Mines near Erzeroom. Half-past Eight o'Clock.
Thursday,	December 5.	Harveian Society. Eight o'Clock.
Friday,	December 6.	Western Medical and Surgical Society. Eight o'Clock.
Saturday,	December 7.	Medical Society of London. *Subject*:—Mr. W. Cox on the Pathology and Treatment of Crowing Inspiration. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 30.

THE HOMŒOPATHS.

We regret that we must, to some extent, run counter this week to the expressed wish of many of our readers. During the past fortnight our table has been covered with letters from subscribers, expressive of disapprobation at our keeping open our pages, even to the examination of a system so opposed as homœopathy is to experience and common sense; but especially to a class of men whose object is to keep themselves before the public, in connexion with a popularly received delusion.

Our correspondents may be right in the expression of such disapprobation; but, as we *did* open our columns to Mr. Wilson, with the double view of obtaining from him his reasons for having deserted the regular ranks, and of receiving from him his exposition of the so-called Hahnemannic law, we feel that we could not well have closed them until we published, as we this day do, his second letter.

We must now, however, state, even to our own legitimate and regular brethren,—misnamed allopaths,—that if they wish their communications on this subject to be inserted in our journal, they must be expressive and brief. To Mr. Wilson's first letter we have sufficiently replied: and the second requires from us only a few passing editorial remarks.

We are not aware whether the Bishop of Oxford be a supporter of the London Hahnemann Hospital or not; but, if he be, we think it not impossible that that astute prelate had some slight personal acquaintance with one of its surgical officers, previous to the appearance of his Lordship's "Pride a Hindrance to True Knowledge." The following quotation from this work appears in Mr. Wilson's letter to-day:—"The lowest eminence may swell easily into a mountain, and the half-learned man may be fearfully elated with an amount of knowledge which would seem to one above him to be nothing but a marvellous ignorance." Mr. Wilson, in thus quoting, must have forgotten these few words, *mutato nomine de te fabula narratur;* but in justice to him, we ought to add, that Mr. Wilson had not seen Dr. Inglis's reply to his former letter when he forwarded the present to us for publication.

Mr. Wilson would have us believe that the homœopaths of the present day pin their homœopathic faith, not so much upon their own powers of observation as upon the acumen and superior intelligence of the *aristocracy* and of the *clergy!* "Will you allow me to ask you," writes Mr. Wilson, "if it never struck you as singular and ominous that the homœopathic system should have gained favour first with the aristocracy of our land, *whose heads*, as a class, I may inform you, *are very large*, and stand A 1. Their education as a class has not been neglected. Happy and fortunate would it have been for *our own* deserving, in spirit well-intentioned and noble profession, could *we* boast, as a class, of the same advantages." Mr. Wilson can here, of course, only allude to *his own* class of "liberal" free-thinkers in medicine.

We cannot too strongly deprecate the prostration of the judgment, in matters medical especially, to the debasing influence attached to mere name and mammon. There is an *aristocracy of mind* to which the enlightened aristocracy of birth look up with unfeigned delight; but we may rest assured that the aristocracy of birth equally despise that unseemly fawning flattery which men, unacquainted with society, are ever apt to "thrust upon them."

We presume not to deny that some of the "aristocracy" may have "very large heads," especially as Mr. Wilson informs us of that fact, but he might have added, "very thick ones too," if he had liked; nor do we wish to deny that some of such may be the friends of Mr. Wilson *in* the Hahnemann hospital, and the strenuous supporters of homœopathy, out of it. But we also know that many of the noblest, and wealthiest, and best instructed in the land besieged the door of the far from homœopathic St. John Long, and even flung the mantle of protection around him when under trial for homicide. We know further, that numbers of the same "class" have yielded faith to the marvels of mesmerism; and thus it has been, and always will be, with every description and species of quackery. Weak indeed must be the cause of homœopathy when it has to be supported by arguments such as these.

We are very unwilling to bring discredit upon so respectable, intelligent, and useful a "class" of men as the "clergy" of England. We gladly leave them under the tutelage of him who brings them forward as his supporters on this occasion; hoping that a concentration of ecclesiastical

force may be given to homœopathy, rather than scattered, as it is at present, in testifying to the skill of every corn-cutter, and to the value and utility of almost every quack nostrum which disgraces the pages of the daily advertising papers.

Such debasement of the human intellect as that brought forward in Mr. Wilson's letter, and adduced by him as an argument in favour of homœopathy, leads rather the reflecting psychologist to a curious but painful investigation of mental phenomena. It forcibly recals the truth of an observation made by the Rev. M. H. Seymour, in his "Mornings among the Jesuits at Rome:"—"I have learned," writes he, "and must bear about me for ever the memory of the lesson, never again to regard the extremities of credulity as inconsistent with the most scientific attainments; or to suppose that what seems the most absurd and marvellous superstition, is incompatible with the highest education; or to think that the utmost prostration of mind is inconsistent with the loftiest range of intellectual power."

Had Mr. Wilson, in either of his letters, favoured us with any new fact or observation in favour of homœopathy, or even with a well-digested old argument, we would gladly have gone into the subject, and have exposed the fallacy; but, even supposing that we had done this, which, with regard to others, has been so often done before, still the question remains, *Cui bono?*—for, no sooner is one annihilated, than others arise—new men with old arguments; and thus, if continually permitted to occupy the pages of a practical journal, the progress of true inductive science must be in proportion retarded. A correspondence in a leading medical journal is doubtless very desirable, and a most fortunate opportunity for the homœopath to parade himself before the public. In it, in order that he may not lose anything by appearing in too lowly a position, he may assume himself to be at least on an equality with, if not superior to, any eminent man, in powers of diagnosis.

In the next place, the facts of the homœpaths are most unquestionably *not* the result of "*strict adherence to the rule laid down by the discoverer*," which is insisted upon to-day as necessary by another correspondent, Mr. Mackern, whose letter we publish with Mr. Wilson's, "in virtue of his position as a homœopathic practitioner."

Mr. Mackern ought to know that the infallibility of Hahnemann is called in question by a very large section of the homœopaths themselves. Need we instance the homœopathic practice at Newcastle, or at the famed Malvern? Or need we adduce the writings of Dr. Madden? Surely, Mr. Mackern ought to be acquainted with the heresies and divisions already so numerous among the Hahnemannists, before he rushes heedlessly to the rescue of his chief from the simple charge of fallibility.

As the homœopathic facts are not the result of a "strict adherence of the rules laid down by the discoverer," neither will they bear the tests applied by Dr. Whateley to the "credibility of witnesses" respecting them;(a) for, as we have just observed, they "agree" *not* "in their testimony;" their "information" flows through the most questionable channels; and there is often a sad, but evident desire manifested by homœopaths "to conceal the truth;" and, in conclusion, the eager dissemination of Hahnemannic facts (?) by the duped disciples, from one to a second, and from that second to a third, and so on, of which we ourselves have often cognizance, leaves La Place's probability of the fact having originated even in a homœopathic decillionth of truth, highly problematical.(a)

So much in reply to our homœopathic correspondents. We shall shortly have a few words to say on the subject of this pseudo-science in general, and of advice to our professional brethren on their relations with these people.

(a) "I suppose," writes the Archbishop, "it will not be denied, that the three following are among the most important points to be ascertained, in deciding on the credibility of witnesses; first, whether they have the means of gaining correct *information*; secondly, whether they have any *interest* in concealing truth or propagating falsehood; and, thirdly, whether they *agree* in their testimony."

(a) La Place, in his "Essai Philosophique sur les Probabilités," thus writes:—"Suppose a fact to be transmitted through twenty persons; the first communicating it to the second, the second to the third, &c., and let the probability of each testimony be expressed by nine-tenths, (that is, suppose that of ten reports made by each witness, nine only are true,) then, at every time the story passes from one witness to another, the evidence is reduced to nine-tenths of what it was before. Thus, after it has passed through the whole twenty, the evidence will be found to be less than one-eighth."

ADVERTISING QUACKERY AND THE SALE OF POISONS.

The disciplinary regulations of the State on subjects relating to the health and lives of the people have hitherto been most imperfect. Owing to the indefatigable exertions of Dr. Southwood Smith, and others of like philanthropy and public spirit, some improvement has been made in our general sanitary regulations; but even in this branch of hygiene the operations have been slow and the amelioration has borne no proportion either to promise or expectation. Although the arrangements for effecting these objects necessitated an interference with an enormous amount of capital, the confiscation of numerous private rights, and the violation of many hoary prejudices, yet the improvement was attempted, and is now happily being accomplished to the heartfelt satisfaction of every sensible and right-minded man in the kingdom.

There are two other evils, however, equally pernicious to health, and more discreditable to our national character, which still flourish boastfully on every side, and mock all the efforts that have yet been made to cut them down, or even to clip the exuberance of their growth. Argument and expostulation, suffering and death, felony and murder, would seem to have failed to convince the Government of the absolute and instant necessity of restraining the two great public scandals—quackery, and the sale of poisons. In these instances, the disturbance of capital would be but trifling, and there would be no invasion of the powers of municipal councils, parish vestries, and corporate trusts; yet, in the absence of all the elements of opposition, against which the sanitary reformers were compelled to wage a fifteen years' war, before the final battle was fought in the House of Commons, the Legislature has not ventured to introduce a Bill, either to restrain the public sale of poisons, or to abolish the dishonest trading in elixirs, galvanic amulets, and bread pills.

The miserable hypochondriac, with an ache in every nervous filament, peevish and petulant, desponding and credulous, is left to the mercy of every advertising quack who offers a universal pill for a universal malady; the victim of arthritis, pinioned hand and foot, and cowering before his unrelenting enemy, slides a brass ring over his finger, and weds himself to disappointment and ridicule; the libertine, pursued by the avenger of his follies, flies to the "Silent Friend" for counsel, and, whilst he blushes over the page, fancies he can be cured of his ailment without revealing his secret, and persists in his delusion, until the canker has eaten into his system and rotted his bones, so that he who runs may read the unwilling confession in his face, and hear it muttered in the huskiness of his accents.

The morals of society are insulted and attacked by the audacious advertiser of secret remedies for secret diseases, and the eye of modesty is abashed by the ill-concealed grossness of his lascivious prolusions. Titles suggestive of obscenity, and a table of contents irritative of every impure passion, are a fit prologue to a volume of falsehood and imposture. The Government has hitherto shown a criminal apathy in the permission it has accorded to this evil. We fear that to some extent the State is a willing accomplice; for we must not forget that every advertisement pays a duty to the Government, and every box of quack pills is protected by a stamp. We should be sorry to be told, that the Government was influenced by such unworthy considerations as these; and yet, when we know with what tenacity Ministers cling to a tax, however unimportant, we do not think that in attributing to them such motives we shall be unjust to their precedents. The medical profession, the clergy, and all the intelligent and moral portion of the community, should associate to extinguish this national disgrace.

Allied to this public nuisance is the indiscriminate sale of poisons by chemists and druggists and oilmen. The facility at the present time with which arsenic, oxalic acid, laudanum, and other deadly poisons, can be procured, renders homicide by these instruments far more frequent than has ever been known in this country. Whole families have been destroyed with a secresy and certainty that, doubtless in many cases, has set human justice at defiance, and secured an immunity from the gallows for the heartless miscreant who, deriding the vigilance of men, had no fear of the judgments of God. The Essex and the Guestling poisoners are only a sample of the atrocities that are perpetrated in this country, either to satisfy a hatred or achieve a gain.

There can be no doubt that the ready sale of poisons suggests their use, and the comparative secresy of their operation prompts also the diabolical intent; thus the laxity of our laws may be justly considered as a prime agency in the growing practice of homicide by these means. It would not be difficult to restrain this practice if the Government were seriously disposed to make the attempt. We trust that those gentlemen who memorialised Sir George Grey upon the subject during last session will continue their exertions. The cause is so good, the necessity for restrictive laws so obvious, and the evils to be averted so crying, that the time cannot be long before a remedy will be supplied, and that a practice which operates as an insidious temptation to crime, and a successful agency for its commission, will be for ever forbidden.

REVIEWS.

Pathological and Surgical Observations on the Diseases of the Joints. By Sir Benjamin Brodie, Bart., V.P.R.S., &c., &c. Fifth Edition. Pp. 399. 1850.

In April, 1813, the author first published his "Observations on Diseases of the Joints." In a paper in the fourth volume of the Medico-Chirurgical Transactions, he says, "I am induced to hope, that the foregoing observations will be found to lay the foundation of a better arrangement of diseases of the joints than that which has been usually adopted. . . . . I shall endeavour to avail myself of every opportunity which may occur of prosecuting the investigations further." And faithfully has he kept his word; for in April, 1850, he puts forth the *fifth* edition of his treatise on this important subject, after nearly forty years' experience, founded on a most extensive practice. He tells us that the edition which is now offered to the public, differs in many respects from those by which it has been preceded, but says:—"I have met with no reason for making any *essential* change in the classification of those affections of the joints which are of the most frequent occurrence. Indeed, it has been to me a source of much satisfaction that all my subsequent experience has tended to confirm those pathological views which I was led to adopt formerly;" and adds, with feelings expressive of a truly scientific mind,—"Although these researches have occupied more or less of my time during the greatest part of my professional life, I am aware that they are still imperfect." The respects in which this edition differs from former ones are in the considerable extension of the parts relating to *the diagnosis* and *treatment* of these diseases, and by the author adding much to the cases and observations illustrating the pathological changes, which his more extended experience has enabled him to do, rendering the present edition more *practical* than the others; the work is, indeed, nearly rewritten, bringing down all the investigations and observations bearing on this subject to the present time. The earliest case related (and there are upwards of eighty) occurred in St. George's Hospital in 1808, and the latest in 1850. To attempt to give a complete analysis of this work, with our limited space, would be out of the question. There was, perhaps, no subject on which a really scientific and practical work was more needed, when this first appeared, than that on which it treats. Previous to its appearance, the diseases of the joints had been dealt with in a most unsatisfactory manner, little distinction being attempted in the different classes of the morbid affections to which they are liable. "White swelling," "morbus coxæ," "scrofulous disease," and other affections, now clearly defined and systematically arranged, were mixed indiscriminately together; and, considering the result of this more scientific mode of describing the various alterations of structure produced by disease, and the treatment they require,—a class of diseases than which none are more important, and which, when their nature is properly understood, more under our control; and, if not comprehended and properly treated, more certain to end in great mischief,—we think all will agree that mankind is greatly indebted to Sir Benjamin Brodie for his labours on this subject. We know of no work that so clearly, and at the same time so scientifically, defines the different forms of disease of which it treats. The estimation in which it has always been held by the Profession is attested by the different foreign languages into which it has been translated, as well as having gone through a large American edition.

We shall merely give an outline of the arrangement adopted of the subject, and draw attention to such parts as may appear to us to merit more particular consideration, more especially of the younger practitioner, who indeed should make himself thoroughly acquainted with this work before he attempts to treat diseases of the joints. The following are the different heads under which the subjects are arranged:—1. Inflammation of the synovial membrane of joints. 2. Ulceration of the synovial membrane. 3. Cases in which the synovial membrane has undergone a morbid alteration of structure. 4. Scrofulous disease of the joints, having its origin in the cancellous structure of the bones. 5. Ulceration of the articular cartilages. 6. Necrosis of joints. 7. Chronic disease of the joints connected with gout and rheumatic gout. 8. Loose cartilages and excrescences in the cavities of joints. 9. Malignant diseases and other morbid growths connected with the joints. 10. Neuralgia of the joints. 11. Chronic abscess in the articular extremity of the tibia. 12. Caries of the spine. 13. Some diseases not included under the foregoing heads. 14. Inflammation of synovial bursæ.

Inflammation of the Synovial Membrane. — The author remarks, "No part of the body is more frequently diseased than the synovial membranes," and relates cases of the usual consequences of inflammation of the synovial membranes. The fluid effused in consequence of inflammation, in the slighter cases, is transparent, differing little from ordinary synovia; in severer cases, turbid serum, sometimes with flakes of lymph; and in some rare cases the fluid is tinged with blood. He remarks, "that, although no period of life is altogether exempt from this disease, the liability to it is not the same in persons of all ages—it is seldom met with in children, but in adults it is more frequently met with than any other inflammatory affection." With regard to its having a local origin, the author says: "Indeed I must confess, in proportion as I have acquired a more extended experience in my profession, I have found more and more reason to believe that local diseases, in the strict sense of the word,

are comparatively rare." To the gouty diathesis, in those cases in which there is an unusual quantity of lithic acid in the blood, as lately described by Dr. Garrod, he ascribes the most common cause of this disease; at other times it may be attributed to checked perspiration or exposure to cold or damp, and then assumes a rheumatic character, and that joined with syphilitic symptoms or the presence of a purulent discharge from the urethra. In relation with the last-named affection, he relates a very interesting case of a patient with gonorrhœa attacked with rheumatic inflammation of the joints, where the eyes were also attacked with inflammation of the same character. The first attack took place in 1817, and till 1846, when he died, no year elapsed without his experiencing an attack of acute iritis. Some cases result in the deposit of lithate of soda both within the joint and external to it, which have a mixed character of gout and rheumatism. With regard to the treatment, the author lays much stress in this, as well as in all other diseases of the joints, on the necessity of keeping the joint in a state of absolute and complete repose; many directions are given on this subject with reference to the different joints, but he says, "the *starch bandage* should never be used on these occasions;" and relates a case in which its application had caused very great mischief, from the bandage not giving way when fluid was effused in consequence of a fresh attack of inflammation—"her sufferings were such as could scarcely be described." In acute cases, where the patient is strong and plethoric, it may be occasionally proper to abstract blood from the arm; but in the greater number of cases local bleeding is sufficient, with calomel, aperients, and salines, and, where the inflammation is of a gouty character, colchicum; but the latter should be always accompanied with small doses of mercury, to correct the effect it has of arresting the secretion of bile. In some cases the patient should be rapidly put under the influence of mercury. In cases, where the joint has been much distended, and much suffering arises from this cause, he says: "I have sometimes ventured to make punctures with a narrow sharp-pointed instrument, drawing off some of the fluid afterwards by means of an exhausted cupping-glass," though he does not much recommend it. Where the inflammation has resulted in the formation of pus, an opening should be made *at once* in a depending situation, so that the matter may have ready exit. In chronic inflammation blisters are useful, but they should be applied at a little distance from the joint. In these cases constitutional treatment is also required, as it usually occurs in gouty and dyspeptic people. In some intractable cases change of climate proves beneficial. When the affection terminates in ulceration of the cartilages great caution is required to keep the joint perfectly at rest, (by means of a leather splint,) so that anchylosis should take place, and this in the position most useful eventually to the patient.

Ulceration of Synovial Membrane.—This sometimes takes place so rapidly as to induce the author to believe it to be the primary disease. Cases are given in which in a few days the disease has run its course and ended fatally.

A Morbid Change of Structure of Synovial Membrane.—Such cases are not uncommon where the inflammation has been of long standing and neglected. It completely loses its natural structure, is very highly vascular, and much thickened, so that it projects into the articular cavity covering the margin of the cartilaginous surface. In other cases the synovial membrane undergoes still more remarkable changes. Vascular fringes project from it into the cavity of the joint, which, in a more advanced stage of the disease, becomes converted into a number of membranous processes containing a fatty matter, and a good deal resembling, not only in appearance but in structure, the *appendices epiploïcæ* of the great intestine. Whilst on this subject the author remarks, "As I stated formerly, Bichat has considered the membrane by which the cartilages are invested as a continuation of the synovial membrane. His view of the matter has been controverted by some modern anatomists. The dispute is in a great measure *verbal*, as no one doubts that there is a thin membrane expanded over the cartilages, which begin at the margin where the synovial membrane terminates," and he refers to Mr. Toynbee's paper on the subject in the *London Journal of Medicine* for 1849. These changes in the synovial membrane sometimes take place where there has been neither pain, nor tenderness, nor signs of inflammation in the commencement; and the disease has proceeded to some extent without inconveniencing the patient. We saw lately a very interesting case confirmatory of this fact. A man had his arm amputated in St. George's Hospital, on account of a severe compound fracture; on examining the elbow-joint when removed, two loose cartilages were found; there was as well fibrous degeneration of the cartilage of the humerus and ulna, and also the particular thickened state of the synovial membrane above described, but, notwithstanding the existence of these three morbid affections, the man had never had the slightest pain or inconvenience, and had never been aware that there was anything wrong with his joint, although he was a very active labourer. With regard to the treatment of these cases, the author says, "I formerly had been led to regard this disease as one which does not admit of a cure, and I still see no reason to doubt the correctness of this opinion respecting it in its more advanced stage; my later experience, however, leads me to think more favourably of it, if it be attended to at an early period." The joint should be kept (by means of well-adapted splints) in a state of complete and absolute repose till anchylosis takes place; in this state, the synovial membrane wastes away, and at last disappears, and the limb may be preserved.

Scrofulous Disease of the Joints, having its Origin in the Cancellous Structure of the Bone, is the next affection in order of frequency. The cancellous structure of the bones is the part primarily affected, ulceration of the cartilage covering the articular surfaces taking place afterwards. The cartilages being ulcerated, the subsequent progress of the disease is, in many respects, the same as where the ulceration takes place under other circumstances. The cancellous structure of the bones, in the first instance, is preternaturally vascular, with a less proportion of phosphate of lime in its composition, there being, at the same time, a deposit of fluid, apparently serum, in the cancelli. As the disease advances the cancelli are found to contain a yellow substance, collected in large masses, resembling the tubercular deposits in other parts of the body. The articulating extremities of the bones ultimately become less vascular than in healthy bones. From the diseased bone, vessels may sometimes be traced carrying red blood and extending into the substance of the cartilage. The author gives a very succinct and lucid description of the progress of the disease, to which we must refer the reader. The disease is usually met with in persons under the age of puberty, and is that class of disease which the practitioner is most constantly called upon for an opinion, and on which it is of the utmost importance that he should form a correct one, and to detect early, as the patient's health and comfort mainly depend upon the kind of *early* treatment he may meet with. We therefore earnestly recommend the attentive perusal of this part of the work to all young practitioners. With regard to the treatment, the author observes:—"Even in the most favourable cases, this is tedious in its progress; and, although there is no disease in which more depends on the surgical treatment than in this, still nothing can be more simple than the principles on which it should be conducted." The disease always indicates defective bodily power, and *whatever* tends to further depression is *injurious*. Abstraction of blood can only be required under some peculiar circumstances. The repeated application of leeches may be regarded as *never* necessary, and as being invariably injurious, as also counter-irritation (except in some very few cases.) The general health must be maintained, as the disease depends altogether on the state of the system generally. Country air, sea-bathing, plain but nutritious diet, long-continued courses of the vinum ferri, (of the old pharmacopæia,) bark, quina, liq. potassæ, cod-liver oil, &c., are the remedies recommended. The author's experience has not led him to place much confidence in the iodide of potassium in these cases, as in many others. As to local treatment,—perfect rest for the joint; where abscess is the result, a free opening should be made with a lancet, but *all rough manipulation must be carefully avoided*; and he thinks it desirable that the wound should not be closed until the abscess has contracted, granulated, and healed up from the bottom. As to the sinus left after the opening of the abscess, if the orifice is disposed to heal prematurely, this may be prevented by the occasional application of caustic potash, care being taken that the application be limited to the orifice. Great attention should be early paid to the manner in which the patient lies, so as to prevent the limb being anchylosed in an awkward or inconvenient position. When this affection occurs in the hip, the limb should be kept as straight as possible, which

will also be the best means of preventing the dislocation of the femur. The author makes the following remarks on a subject which has lately occupied the Profession, and one on which surgeons still differ in opinion. We beg to call the reader's special attention to them :—

"In an old case of diseased hip-joint, the head of the femur may sometimes be felt lying on the dorsum of the ilium ; and in consequence of the general emaciation of the patient and the wasting of the muscles, with so little soft parts over it, that it seems to be almost immediately beneath the common integuments. In such a case it has been proposed to make an incision on it, and remove the head and neck of the femur by a saw. It would appear that this operation has been actually performed with some degree of advantage, and I do not doubt that circumstances may occur to make it worth while to have recourse to it. But it is to be observed, at the same time, that all that can be thus accomplished is the removal of only one portion of the disease, and that it is the largest portion of it in the bone of the pelvis which is necessarily allowed to remain. The operation cannot be performed without a certain degree of local disturbance and more or less loss of blood ; and, taking all these things into consideration, I conceive that we should not recommend it, except where some very unequivocal advantage may be expected from it."

In the chapter *On Ulceration of Articular Cartilages*, when speaking of the vascularity of cartilages, the author says :—

"In cases of disease, however, I cannot doubt that I have myself seen blood-vessels extending from the surface of the bone into the substance of the adjoining cartilage. Mr. Herbert Mayo, has described an appearance, and Mr. Liston published a drawing, of such vessels filled with injection as they appeared in the field of the microscope. The latter gentleman was kind enough to show me the preparation from which the drawing was taken, and it certainly seemed to me that there was no doubt that the parts were as they were represented by him to be. In saying this, however, I do not mean to affirm, nor did Mr. Liston, as I apprehend, mean to affirm, that blood-vessels extend into the articular cartilage of the adult when actually in a healthy state."

A wasting or total absorption of cartilage may take place : this may arise from mere want of use, under the same law as that to which the wasting of a paralysed limb may be referred. Cases are given of this change in which there existed no disease of the joints themselves, but where the cartilages had been gradually and entirely absorbed ; but this is a very different process from that of ulceration, of which affection the author gives a most elaborate history ; and, in reference to this subject, remarks,—"Mr. Birkett, in Guy's Hospital Reports, observes, that 'it is now a well established fact, that there is no such morbid process as ulceration of the cartilage. . . . The destruction of this tissue depends on a loss of nutrition and disintegration, in which the development of fat plays a part.' But it may be a question," (observes our author,) "whether ulceration, in whatever part of the body it occurs, is not a process of disintegration depending on a want of nutrition." Hence, as Hunter observed in his "Treatise on the Blood," "it becomes, in many cases, a substitute for mortification." It would be impossible to do anything like justice to this chapter : it requires and deserves the very careful study of every one who wishes to be master of this subject. The author has been led to conclude, that ulceration of the cartilages is, in many instances at least, the result of rheumatism affecting the harder parts, and the effect produced upon it by certain remedies is favourable to this opinion. Mr. Herbert Mayo has published some cases in which this affection had shown itself in the form of an acute disease, attended with urgent symptoms, and proceeding rapidly to its termination, and the author has met with similar ones. There is, however, no doubt that such cases form the exception to the general rule, as it is most generally (when it occurs as a primary affection) of a chronic nature. With regard to the great pain experienced by patients suffering under this disease, he attributes the increased sensibility of these parts to the bony plate beneath the cartilage, rather than to the cartilage itself. In drawing a distinction between this affection and inflammation of the synonvial membrane, he remarks that in the former, in the early stages, there is rarely any effusion into the joint, whilst in the latter it is one of the earliest symptoms. This symptom is alone sufficient to prevent an error in diagnosis, when the surgeon is consulted before the disease is far advanced. In this affection, unless its progress be stopped by art, abscess forms within the joint. In this stage it may clearly be distinguished from ulceration of the cartilages, resulting from scrofulous disease of the bones, by the great difference in the amount of pain experienced. In the latter affection, the disease proceeds to great lengths, attended with very little pain ; but, in ulceration of the cartilages, as a primary disease, the pain is very great throughout. Experience has taught the author to modify his earlier opinion, that this disease was to be relieved exclusively by local remedies, and has led him to the conclusion that there are remedies acting through the medium of the constitution, which exercise a most beneficial influence over the local malady. In the acute form mercury is very beneficial ; sarsaparilla alone, or with the bichloride of mercury ; but it is only in the early stages, before suppuration occurs, that mercury is to be given ; sometimes counter-irritation is useful, but the author is less disposed to recommend it than formerly.

Necrosis of Joints.—Where joints are in a state of ulceration, it may happen that a portion of carious bone is separated by means of exfoliation, forming a sequestrum, which, when locked up in the extremities of the bone, may sometimes be removed by the use of the trephine.

Chronic Diseases of the Joints connected with Gout and Rheumatism.—Where patients have suffered for a long time from affections of the joints connected with either of these diseases, on dissection the following appearances are found :—The cartilages are sometimes completely removed ; a thin layer of white chalk-like matter is found deposited on the bones where the cartilages have disappeared ; in some few cases, the cavity of the synovial membrane is found filled with a thick white fluid, being a mixture of lithate of soda and pus, but suppuration is very uncommon in these cases. The lithate of soda, in these cases, is found deposited underneath the synovial membrane, on the bone near the margin of the cartilage, in the cancelli of the bone, and in the cellular tissue external to the joint. The Author believes it not unlikely that these deposits have been much increased, if not absolutely produced, by patients taking large quantities of soda for the purpose of correcting acidity of the stomach. He thinks *some* of the cases Dr. Smith, of Dublin, has described, under the term of *morbus coxæ senilis*, belong to this class.

Loose Cartilages and Excrescences in the Cavities of the Joints.—They are supposed to be formed in connexion with synovial membrane, and, after the membranous attachment has become elongated and the cartilage larger, the former gives way, and the latter becomes loose. When a bandage fails to keep a loose cartilage from interfering with the motions of a joint, and causes pain, the removal of the body is recommended, "*provided it be done in a prudent and cautious manner,*"—a very necessary precaution, as the most lamentable results sometimes follow this operation, however carefully performed.

Malignant Diseases of Joints.—Here, as in other parts of the body, little can be done as to treatment with any hope of success ; but we cannot doubt that malignant diseases of bone hold out more encouragement for their removal, than the same disease in any other tissue, provided the whole bone can be removed ; but there is little use in operating if this cannot be effected.

Neuralgia of Joints.—This chapter should be carefully studied by the young practitioner, as the affection of which it treats is more likely to lead him astray as to diagnosis than any other. Sir Benjamin Brodie has more fully entered upon this subject in another work, viz., "Lectures on Certain Local Nervous Affections," published in 1837. There are no affections which are more likely to baffle and try the patience of the surgeon than these.

Chronic Abscess in the Articular extremity of the Tibia.—This disease has already been described by the author, both in the "Medico-Chirurgical Transactions," and in "Lectures on Surgery and Pathology," published in 1846. This is perhaps the most interesting chapter in the book, not only from the most successful results that follow the treatment recommended for such cases, but from the simple and scientific reasoning by which the necessary treatment was arrived at. A patient having suffered greatly with continued pain in the lower extremity of the tibia, all kinds of treatment were had recourse to, but without any benefit ; the limb was accordingly amputated, and upon examination the following was found :—"The whole of the lower extremity of the tibia was harder and more compact than under ordinary circumstances, in consequence, as it appeared, of

some deposit of bone in the cancellous structure of bone; and at its centre, about one-third of an inch above the ankle, there was a cavity of the size of an ordinary walnut, filled with dark-coloured pus." From this examination, the author was led to believe that it was highly probable, that if the exact nature of the disease had been understood, and the bone had been perforated with a trephine, so as to allow the pus collected in its interior to escape, a cure would have been effected without the loss of the limb, and with little or no danger to the patient's life. When a similar case presented itself, this procedure was put in practice with perfect success. The author observes, "since then five similar cases have come under my care, in every one of which a complete cure was at once obtained by this same operation, so that I have the satisfaction of knowing that in my own practice as many as six individuals have been able to preserve limbs, which must inevitably have been amputated if the dissection of the limb in one other case had not made me acquainted with the real nature of the disease." This is one of the real triumphs of science over disease.

Caries of the Spine.—This subject alone occupies seventy pages of the book, and it is out of our power to give even an analysis of it, we having already much overstepped our usual bounds as to space: but one or two extracts we must make:—

"In systematic works on surgery, the lumbar or psoas abscess is usually described as if it were (in some instances at least) a specific or primary disease, having its origin in the *psoas* muscle; but, according to all the experience I have had of these cases, this is altogether a mistaken view of the subject. . . . In examining cases of lumbar abscess after death, I have found caries of the vertebræ, in which the abscess has manifestly originated. . . . On no account should any attempt be made, either by laying the patient on his back, on a flat board, or by the application of machinery, to remove the angular curvature so as to restore the spine to its original shape; without such undue interference on the part of the surgeon, the carious surface of the vertebræ above will come in contact with the vertebra below, and it is to the union which takes place under these circumstances, at first by soft substance and afterwards by bony matter, and to this alone we are to look for the patient's recovery."

Speaking of scrofulous caries of the spine, he says:—

"In the early part of my professional life I was led to follow the practice which was then very generally adopted for treating caries of the spine, by means of setons and caustic issues; a more enlarged experience has satisfied me that, in the very great majority of cases, this painful and loathsome mode of treatment is not only not useful, but positively injurious. For many years past I have ceased to torment my patients in this manner, and I am convinced that this change of treatment has been attended with the happiest results."

There is a chapter on inflammation of synovial bursæ, but we must stop. We have said enough, if anything were indeed necessary, to induce every practitioner to procure the work, and make himself master of its contents. Sir Benjamin Brodie's position, and the well known merit of all his writings, render it quite unnecessary for us to say a word more on the value of this book; but we must express our opinion of the great praise that is due to him for not resting (like some others) satisfied with having put forward his early observations on this subject, but for giving the Profession the advantage of his more extended experience, and employing that time which he might fairly have passed in enjoying his well-earned "*otium cum dignitate*," in perfecting and almost rewriting this his earliest professional work. In conclusion, we must express a hope that it will not be long before he increases the obligations the Profession are under to him for his labours, by publishing his *Illustrations* to this work. We have heard that he is in possession of the most perfect collection of beautifully-executed drawings illustrating the cases described by him, and which we trust it is his intention to publish at no great distance of time.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

CURES FOR HYDROPHOBIA.

For some time past the journals here, political, and, I regret to add, scientific likewise, have been seized with the transatlantic *scabies* of giving credence and publicity to the most absurd *canards*; in other words, to what we would call most decided hoaxes. To struggle with success against the increasing vogue of homœopathy and similar contrivances, some grand but legitimate discovery would, it seems, be necessary. Diseases hitherto incurable present a wide field, and into this every aspirant is busily burrowing, in the hope of extracting the foundation for fame at least, if not for fortune.

One of the most recent *canards* gravely propagated by a journal of no small repute, refers to a pretended discovery for the cure of hydrophobia and other fatal diseases produced by the bite of rabid or poisonous animals. The seeds or powder of the cedron, a plant lately imported from South America, is to work this wonder; and a grand experiment, it is said, will be performed at the Hotel Dieu. A medical student is to be thrown into a state of insensibility with chloroform; his arm is then to be exposed to a viper, and the animal, irritated by one of the medical men present, will, of course, inflict a tremendous bite on the disciple of Æsculapius. The magic powder is then applied, a cure effected, and the grand discovery stamped by irrefragable experiment. Unfortunately for this tale, it does not appear that the "Tartar" has been yet caught, either in the shape of reptile or student. If, however, a victim be required, it would seem more reasonable to employ one of those professors stuffed with malice and venom, to whom J. B. Rousseau has alluded.

GOITRE.

M. Sedillot, fresh from Strasbourg, whence he has been removed, as I mentioned in my last, to take possession of the surgical chair at the new military school of Val-de-Grace, made his *début* at the Academy of Medicine, on Tuesday last. He is a very fluent and elegant speaker; but, like many other beginners, he seems to have put his foot in the mud at the first step.

The subject in debate was goitre, and M. Sedillot, who has had much experience in this malady, broached the doctrine that goitre should be distinguished into two kinds, viz., the true and the false. True goitre was a general hypertrophy of the thyroid gland, and does not admit of surgical operation. False goitre is formed by various tumours developed in the substance of the gland, many of which may be extirpated with advantage. Roux and Velpeau both made an onslaught on this theory, and had little difficulty in demolishing it. Notwithstanding this incipient failure, M. Sedillot has good stuff in him, and will be an acquisition to the Academy of which he is corresponding member. But, talking of

NEW THEORIES,

how shall I describe to you one just distributed here through the medium of the German Medical Society, (32, Rue Hautefeuille,) and emanating from Dr. Walfer, of Wurtemburg, who earnestly entreats that it may be submitted to further experiment? If you have any mathematical subscribers they may, perhaps, lend a hand. Dr. Walfer is, at all events, a man of immense patience, united to great faith, and by the latter we know may mountains be moved. His object has been to ascertain

"The influence exercised by the periods of the day or the year over the births and deaths in a given locality."

To obtain data, he examined, with the most scrupulous care, the registries of the district of Leutkirch, from 1808 to 1845, noting down every circumstance calculated to throw light on the subject. Having, after this immense labour, calculated a "mortality curve," Dr. Walfer shows that the daily curve presents an increase, nearly regular, of mortality from midnight to eight o'clock in the morning; and a decrease, just as regular, from this latter hour to one o'clock p.m., when the mortality is at its minimum.

Neither solar heat nor atmospheric pressure seems to bear any relation to this curve; but it bears a very striking analogy to the deviations of the magnetic needle, and as we have (according to Dr. Walfer) every reason to place the source of terrestrial magnetism in the sun, the direct influence of that body on the daily oscillations of mortality, is demonstrated.

The learned doctor, however, goes a step further, and lays down a theorem, deduced from his observations, which I may record, if not for the instruction, at least for the astonishment of your readers. It is as follows:—If we suppose the variable distance of the sun from the earth as a variable force, decomposible into two factors, F and G, or two co-ordinate axes, perpendicular to one another, one of which passes through the zenith and nadir, while the other passes through the horizontal plane at a point where the azimuth is = 0, (and, consequently, where the variable distance of the sun from the earth is a resultant of F and G,) then "The change of mortality during the year is directly proportionate to the sum of the composing forces, and (inversely) parallel to the cube of the resultant."

If any of your readers can extract the marrow out of this, you may fairly promise him the prize of mathematics at Cambridge or Dublin.

IRELAND.

DUBLIN SCHOOLS.

The schools for the season are now fairly afloat, and the number of pupils as great as might have been expected. In Dublin, at his "introductory," at the College of Surgeons, Dr. Jacob dwelt with much significance on the value of surgery to the general practitioner, in the altered condition of things in Ireland at present. Every man should be prepared, he said, to tie an artery in the cabins of the poor, by the light of a farthing candle; use the trephine, if called on to do so, extract bullets, or operate for hernia, with the same amount of candle-light; he should be able to know and cure pericarditis as well as syphilis, pneumonia and œdema of the glottis, as well as any thing purely surgical; he should know something of pharmacy, and carry his nicer medicines with him as he would his instruments; midwifery, too, should come within the number of his legitimate studies. A time existed when the student was expected to become a pure surgeon; but, as well remarked by the lecturer, there is not as much pure surgery in the world as would support one man in ten who practises. The monopoly the College holds with respect to county infirmaries in Ireland, Jacob quaintly remarked, should be done away with, when all other monopolies in the world were demolished.

SURGICAL SOCIETY.

The first meeting of this Society took place on Saturday evening, the 23rd instant. Independently of a large muster of original members, several army and navy surgeons attended, much interest being excited in the discussion of the subject of

COMPRESSION IN ANEURISM,

which seems to have given so much dissatisfaction to Mr. Syme and the Edinburgh school. The President of the College of Surgeons, Dr. Beatty, took the chair; and, after his address, Mr. Smyley gave the details of a case of aneurism, existing in the middle third of the thigh, which was cured by compression. The peculiarity chiefly dwelt upon in the case was, that the patient literally treated and cured himself while attending to his ordinary business, for he could not be induced to come into hospital. The cure was somewhat tedious, but satisfactory. In the discussion which ensued, a case was mentioned in which three consecutive aneurisms in the same patient were all cured by the application of the clamps. This very remarkable case, it was stated, was seen by Sir Benjamin Brodie when lately in Dublin. The anxiety evinced by Sir Benjamin Brodie, indeed, to see all the cases actually cured in Dublin at the time of his visit, was spoken of at the Society with much applause; his inquiries into every particular, his inspection of the apparatus, and his general interest in the whole matter before giving an opinion, contrasting singularly with the dogmatism of our friends at the other side of the Tweed, who have perhaps never seen the apparatus at all, or a case cured by the new method.

The proceedings of the evening were concluded by the details of a case of soft cancer, by Mr. Tuffnell, which was illustrated by casts and drawings.

GENERAL CORRESPONDENCE.

THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

Sir,—I am pleased to observe, in your journal of November 2, 1850, in which you have published my letter, that you intend returning shortly to the discussion of homœopathy, and have promised to "lay bare the sandy foundations of that building, which the advancing tide of truth has already shaken and will speedily engulph." I suppose you will commence your task, as your mode of reasoning seems to indicate, after you have adopted the course of reading and examination I have suggested to you in my letter. Under these circumstances I should have waited patiently for your promised observations had not a few inaccurate statements crept into your comments on my letter, which the cause of truth and a respect as well as justice to myself compel me to correct at once. I make no pretensions to the higher dialectics, or to casuistry and special pleading, but it strikes me, that, although some time has elapsed since I left school, I could still play a game with you at syllogistic single-sticks; and, if you will allow me to give you proof that I have not quite forgotten the chapter "Of Fallacies," or "On the Discovery of Truth," I will quote from Archbishop Whately, of Dublin, no mean authority on such matters, and who, by the way, is one of our most firm and staunch homœopaths. Before I give you the quotations, will you allow me to ask you if it never struck you as singular and ominous, that the homœopathic system should have gained favour first with the aristocracy of our land, whose heads, as a class, I may inform you, are very large, and stand A 1. Their education, as a class, has not been neglected. Happy and fortunate would it have been for our own deserving, in spirit well-intentioned, and noble profession could we boast, as a class, of the same advantages. We would not have had so many unhappy dissensions, nor would medical science have been stigmatised as an "art that has made less progress than any in the world." The clergy and members of the bar are as notable in their adoption and patronage of homœopathy as the members of the Senate. Is it likely, think you, that the most eminent and gifted from among these ranks should be deluded? Such men are not likely to pin their faith to delusions. To use the expression of an elegant writer, "They live in a serener air; they are more free from bigotry; they have more time to investigate any new subject of inquiry." Bigotry, perhaps, never manifested itself more strongly than in the reluctance of medical men to examine the proposal of Lady Mary Wortley Montague to introduce inoculation for the small-pox, except it be the historical fact, that criminals in Newgate preferred hanging to a reprieve, on condition of their submitting to be inoculated. The highest ranks here again proved the specific action of inoculation in their own persons. Let us, however, return to Archbishop Whately, who says, "*No matter of fact* can be mathematically demonstrated; though it may be proved in such a manner as to leave no doubt on the mind." Again: "the most extensive observation of facts will often be worse than useless to those who are deficient in the power of discriminating and selecting. Their knowledge, whether much or little, is like food to a body whose digestive system is so much impaired, as to be incapable of separating the nutritious portions." To attempt to remedy the defect of minds thus constituted, "by imparting to them additional knowledge,—to confer the advantage of wider experience on those who have not the power of profiting by experience, is to attempt enlarging the prospect of a short-sighted man, by bringing him to the top of a hill." These quotations are, I venture to suggest, by no means inapplicable on the present occasion. Allow me to thank you most sincerely for even the partial compliment you have paid to Hahnemann, the greatest benefactor to medical science that ever lived; and I trust you will live long enough to discover his genius, when you will be impelled to pay further tribute to his memory. You say, "he had no mistrust of his own dogma; he made no qualifications." It is quite true, as his followers have found, that he had no reason to have any "mistrust of his own dogma," but that "he made no qualification" is an error; which confirms what I suspected, when, in my last letter, I convicted you of error, and charged you with either not having read Hahnemann's writings, or of being a "hasty commentator." Upon the latter ground I am afraid you cannot now be acquitted, as you will discover on reading his "Organon" as well as his other invaluable writings, that he has made several qualifications, not only in those cases where surgical interference may be required, but in cases of poisoning, asphyxia, &c., &c.; on which occasions, nevertheless, you will find he also directs treatment in a rational manner. You say, "his followers now lie under the disadvantage of being unable in any way to modify or soften the expressions of their inexorable chief." This is an assertion that is not true, and his followers challenge you to give a single proof of your statement. At the same time his true followers proclaim his law of "like cures like" to be perfect — the very reason why it has maintained its vitality, that it has grown with its growth and strengthened with its strength—a result totally at variance with "dogmas" based on "sandy foundations," and which have had an ephemeral existence. No doubt Hahnemann was far in advance of his age, and with his demise much wisdom was lost; yet it did not perish. Hahnemann, you will find, like a true philosopher, admitted knowledge to be progressive. I am happy to perceive that you have seen your misapprehension of what you gave in a former number as the exposition of the homœopathic law, "as you now very properly say," that the rule for administering medicines was included in the expression that "like cures like."

Now let us proceed to the grand questions—"*Where are the proofs? Where are the examples that 'like cures like?' On what facts is this dogma based?*" I reply, "the proofs" and "the ex-

amples" are to be found in the "Organon," most of them culled from allopathic empirical experience, which has daily to this very hour only tended to verify and confirm the truths of the homœopathic law, and to stamp the bewildering uncertainty of empirical allopathy; and these "vague analogies," as you choose to call them, will be found to have been accumulating every hour since the time when Hahnemann collected many of what then existed on record. Need I be compelled to refer you to the various works on toxicology, in which there are recorded such cases of poisoning as will allow us an insight into the medicinal effects of drugs when criminally administered, or otherwise conveyed into the human system? I say such cases as will afford us an insight of medicinal action, and for the following reason do I thus guardedly individualise my expression of *such cases*. You are aware that in cases of violent poisoning, where perhaps a most powerful irritant or corrosive poison has been swallowed in a massive dose, that the effect may have been so terrific as to destroy life at once, where no symptoms of any practical value can be obtained, so as to inform us of the true specific action of the drug; and if the patient even survives under a massive dose, the most excessive reactions have taken place in the organism, so as to deprive us of the more delicate and proportionately useful effects of drugs which we render available in homœopathic practice. I will prove my position here from an authority in your own school, whom you dare not gainsay as the most trustworthy and distinguished British toxicologist of the day. Professor Christison, in his incomparable work, "A Treatise on Poisons," says:—"By a variety of causes, the action of poisons may be modified both in degree and kind."

"1. *Quantity* affects their action materially. Not only do they produce their effects more rapidly in large doses; it is sometimes even quite altered in kind. A striking example has just been related in the case of oxalic acid, which, according to the dose, may corrode the stomach or act on the heart, or on the spine, or on the brain. In like manner, arsenic, in a small dose, may cause gastritis of several days' duration; while a large dose may prove fatal in two or three hours by affecting the action of the heart. White hellabore in small doses excites inflammation in the stomach and bowels; in larger doses, giddiness, convulsions, coma; and in either way it may prove fatal." Any one who will take the trouble to examine carefully Professor Christison's work will find numerous instances of so close an analogy between medicinal phenomena (drug diseases) and morbid phenomena (natural diseases) that it requires no ordinary degree of diagnostic acumen to distinguish between a medicinal disease and a natural disease. I may just allude, amongst many, to an instance in connexion with opium, where Dr. Leigh, quoted by Christison, in his "Experimental Inquiry," relates what occurred to a friend of his who repeatedly made the experiment.

"If in the evening when he felt *sleepy*, he took thirty drops of laudanum, he was enlivened so that he could resume his studies; and if, when the *usual drowsiness* approached, which it did in two hours, he took a hundred drops more, he soon became so much exhilarated, that he was compelled to laugh, and sing, and dance." This is a very beautiful illustration of the homœopathic law, if read by those who can and will understand its teachings. A characteristic principle belonging to opium is here displayed, of which the homœopathic practitioner daily avails himself in a rational manner when he encounters morbid somnolency in disease. I will just give another illustration of the close analogy existing between drug disease and natural disease, and the instance I select from Christison is the resemblance between the effects of nux vomica and *tetanus* or locked-jaw, which, he says, "is the only disease which produces similar effects. But that disease never proves so quickly fatal as the rapid cases of poisoning with nux vomica, and it never produces the symptoms of irritation observed in the slower cases. Besides, the fits of natural tetanus are almost always slow in being formed; while nux vomica brings on perfect fits in an hour or less. *It is right to remember, however, that nux vomica may be given in small doses, frequently repeated, and gradually increased, so as to imitate exactly the phenomena of tetanus from natural causes.*" This quotation, part of which I have italicised, is another as beautiful illustration of the truth of the homœopathic law as I could instance, and is entirely confirmatory of what Hahnemann has so often uttered (in regard to what is required in the proper proving of drugs before they can be successfully and rationally employed in disease), in terms so strict and rigid that no man could mistake their import and extent. Were I to continue further illustrations of the "vague analogies" existing between natural diseases, I should only require to produce volumes already existing, which would be an insult to the understanding of your readers, who must surely be aware of the existence of such volumes, though it would appear many of them have never considered the mighty import of the contained facts. Need I tell you that it was from a glimpse of the law for the selection of medicines in disease, conveyed from such "vague analogies" as were also embodied in well-attested cures by single remedies, that Hahnemann was led to develope the homœopathic law. He went, however, to work in a scientific manner, and proved medicines on himself and others, and accurately noted their effects in a manner similar to the illustration I have just related from Professor Christison in reference to nux vomica. From such provings and well attested cases of poisoning, Hahnemann framed his "Materia Medica Pura." By an increase of disciples, and his own unwearying exertions, not only were provings of medicines extended, but others were again re-proved, amongst which he found some of a more permanent and deeper action on the system, and which, you will find, formed the basis for his admirable volumes on Chronic Diseases. Could I instil a becoming determination into the hearts of my brethren who love their profession, and are really interested in the "most useful art the world can know," they would read these volumes, and they would rise from their task instructed, and inspired with a veneration for the genius and goodness of their author which no language can convey. Surely no one will be foolhardy enough to deny the provings of Hahnemann and his disciples, seeing that works on toxicology, such as that of Professor Christison, prove the fact, that drugs administered in a certain way do produce certain symptoms; seeing that we can appeal to English experiments for a verification of the fact. Here, I would ask you, and my allopathic brethren, if that excellent quarterly, the *British Journal of Homœopathy*, is a stranger to you. In it will be found recorded Dr. Drysdale's proving of bichromate of potass, in which he was assisted by other gentlemen of the strictest probity and truthfulness. Surely you are not ignorant of Dr. Fleming's (an allopath) proving of aconite any more than you can be of the proving society of distinguished men in Vienna, on whom, for their self-devotion and heroic sufferings in the cause of truth, every lover of science and of humanity must bestow the most unbounded praise and admiration. What do all these facts prove? They prove, from trustworthy testimony, that various drugs, when taken by the healthy human being, simulate the various phenomena of natural disease. The homœopathic "Materia Medica," where such provings are recorded, is to be found in the bookseller's shop. Professor Christison's works, and numerous others of the same class, testify that there is an analogy,—a similitude—not identity, between drug diseases and natural diseases. Hahnemann tells you, that some of your best allopathic cures, although you have made them empirically, are homœopathic. He furnishes you with cases in proof; other practitioners do the same, whose capability of diagnosis and truthfulness are unimpeachable. Hahnemann instructs you how to select the drug; and if you can prove that you have fulfilled all that homœopathy requires of you before you can successfully put it in practice, and you find it wanting, you are challenged to publish the result. You say, "We proposed to Mr. Wilson a simple question,—What arguments, what experiments, what facts, have led him to believe that the homœopathic dogma, that 'like cures like,' is true?" You add: "Mr. Wilson has returned no satisfactory answer. We ask him what special examples convinced *him?* and, in return, he refers us to the 'Organon' of Hahnemann," &c. This is not the fact. I only referred you to the "Organon" for an exposition of the homœopathic law; and this was done from the best and most considerate motives, as I had no idea that you would reprint the entire "Organon" in your pages. I told you I should be very happy to relate to you cases, if you would allow your prejudices to calm down; to which you return no answer. The arguments, then, which led me to believe the homœopathic "dogma" was true, I found in the "Organon" and other writings; I shall be glad to reproduce these arguments and grounds of my belief in your columns, if you will publish them. The experiments which led me to believe the homœopathic "dogma" to be true,—were what I suppose you would call the "vague analogies," many of them alluded to in the "Organon," and to be found *in extenso* in the toxicological and therapeutical works of authors, and confirmed by devoted provers; these I shall be also delighted to reproduce in your columns. The facts which led me to believe the homœopathic "dogma" was true, and that in the expression, that "like cures like," was included "the rule for administering medicines," I verified by the application of my newly acquired knowledge, in the observance of my own facts, which I will also be happy to relate in your columns. What more would you require of me? You say you "have nothing to prove." I shall quote a passage from "Pride a Hindrance to True Knowledge," which may lead you to a different conclusion. Samuel, Lord Bishop of Oxford, says, "A deep acquaintance with the mysteries around him may, indeed, tend to humble any man, by fixing his eyes on his own absolute lack

of knowledge, rather than on his own relative superiority. But as he emerges from the mere level, it is rather with those below him, than with the heights which soar far above him, that he is apt to contrast his standing place; and so the lowest eminence may swell easily into a mountain, and the half-learned man may be fearfully elated with an amount of knowledge which would seem to one above him to be nothing but a marvellous ignorance." This beautiful simile applies admirably to illustrate the present position of untutored allopaths, and those distinguished men who were formerly an ornament to the professorial chairs which they occupied as allopaths; but who, having seen the grandeur and truth of Hahnemann's medical philosophy, and having, after examination, adopted it, are now in a state of antagonism with their former allopathic colleagues, who were wont to be guided and instructed by their wisdom. Upon reflection, I think those who will walk in wilful blindness have everything to prove—First, that they have educated themselves up to the advanced state of knowledge; and, secondly, that they are qualified to test homœopathy before they attempt to ridicule and condemn a system of which they know nothing. I could have afforded to pass over your insinuations, had you not judged me harshly and unjustly. I should have thought before you did so that you would have ascertained some facts concerning me, especially when I had placed in your hands testimonials from men whose integrity is above suspicion, and whose attainments have placed them at the head of their respective ranks—men who, I assure you, notwithstanding their exalted position, are wont "to bring to bear a whole array of drugs" in a no less modified degree than I used to do when an allopathic practitioner—men also, I assure you, from pretty extensive experience, association, and knowledge of their practice, who had no less "singular confusion" existing in their minds "between drugs and the art of healing;" men, I assure you further, who never could have bestowed more consideration on "the subjects of diet, of exercise, of calling into active play the several emunctories of the system, as falling within the domain of medical practice" than myself. You must not imagine me egotistical or conceited, as I always like to speak out what I feel and believe to be the truth. Unfair and ungentlemanly insinuations I scorn. Again, you must allow me to tell you that I do not comprehend your ambiguous modes of expression. I cannot allow myself to be placed by you, who can have no knowledge of me, amongst those practitioners who, having no powers of "accurate diagnosis, with no knowledge of the inevitable course of the disease they treat, with no real conception of the nature of their therapeutic means, torture their patient with most potent agents." Like an honest judge, you should have heard me out before you came to the conclusion, that I attributed "the whole cure to homœopathy." This is an inference of your own, not warranted by any sound rules of logic. You must patiently permit me to recal your attention to the following strange reasoning of your own:—"At length the patient, wearied by the treatment, deserts them. If, however, the treatment has not been very injudicious, the disease has been in reality slowly disappearing. Nature is never inactive, but, with incessant changes, tends to repair the weakened points of her wonderful machine. The homœopathist, receiving the case at its termination, reaps the credit of the cure. In the same way, almost daily, one practitioner falls into discredit, another acquires fame, from the mere accident that one has treated the commencement, the other the termination, of a disease in which time is a necessary element of cure. Nay, the homœopathist now finds the argument turning against himself, and numerous patients who resort to him at the commencement of a disease of this sort, subsequently abandon him, and recover under the usual care of regular practitioners." Now I confess it puzzles me to understand wherein this illogical illustration tells more against homœopathy than allopathy. You misquote me.

If you will refer to my letter, you will find that I was in a transition state—a state of inquiry—"sadly shook my confidence" is my expression. I am obliged for your reluctance to be "censorious," and I wish it were in my power to overlook what seems to me a most singular blunder; and truly surprising does it seem that it should have emanated from the learned Editor of the *Medical Times*. I feel with you, however, that "great principles are at stake," and we must not, therefore, "hesitate to declare" the truth. You have stated that "the different effects of oxalic acid taken in large quantity and in the solid form, (when it acts corrosively on the stomach, and passes with great slowness into the circulation, but kills chiefly by its local action,) and taken in smaller quantities, with an amount of fluid in the stomach sufficient to prevent its strong corrosive action, and to insure its transit into the circulation, (when it kills more speedily by its specific effects on remoter parts of the system,) are so well known to every one, that we can only conceive Mr. Wilson must have momentarily forgotten them, when he cited them as instances favouring the notion, that lessening the dose of a medicine can increase its force." Let us hear what Professor Christison says to this—"A *large* dose causes *sudden* death, by paralysing the heart." . . . "It is the most rapid and unerring of all the common poisons. The *London Courier* (February 1, 1823) contains an inquest on the body of a young man, who appears to have survived hardly ten minutes; an equally rapid case of a young lady, who poisoned herself with an ounce, is mentioned in the *St. James's Chronicle*, August 17, 1826; and a few of those who have died survived above *an hour*. This rule, however, is by no means without exception. *Mr. Webb* (*London Medical Repository*, *XXII.*, 476) has described a case which did not prove fatal for *thirteen hours*, (although taken in solution, and diluted afterwards with copious draughts of water.) *Dr. Arrowsmith*, of Coventry, has favoured me with the particulars of a very interesting case, which lasted for the same period." Therefore it would appear, that although oxalic acid be taken in *smaller* quantities" and in solution, it will *not* kill "*more speedily*," as you assert, seeing that in *two* cases cited by Christison, in one instance where only an ounce was swallowed in a concentrated or "solid form," death resulted after "*hardly ten minutes*." Much misconception, I perceive, is likely to arise betwixt you and myself from our attaching a different meaning to the same word, "*power*," which you have now made synonymous with "force;" which meaning you seem anxious to fix me with, although in my letter I told you the meaning of the word was read by me as synonymous with "*influence*," and from which I see no reason to change. In this important discussion, let us deal fairly by each other—the sooner we shall arrive at the truth. Your admission of the *influence* of trituration, in rendering crude and inert materials active agents, is all I stated and all I require to prove. As to the *why*, that does not concern or alter the fact, seeing that all theoretical explanations do not disclose the *how* or *wherefore* of the action of remedial agents on the human economy. I hope you will consider it unnecessary for me to cite any allopathic authorities to expose the conflicting opinions on this hidden and mysterious matter. One more quotation from your remarks, and I halt for the present. You say, "It is the duty of every man, when an assertion is made which affects the whole art of curing diseases, to examine it for himself; and if he finds, as in the case of the homœopathic dogma, 'like cures like,' that the assertion is a vain imagination, and is unworthy of scientific consideration, then we say, every man is bound to express, openly and manfully, in the face of day, his conviction of the falsehood of the pretended truth." Allow me to suggest that you will find the "assertion" backed up by indisputable facts, if you will examine for yourself, or watch the practice at the Hahnemann and other homœopathic hospitals. Surely you cannot express your *conviction* until you have witnessed the results of the practice as well as the "assertion." If you wait to be convinced by argument alone, allow me to remind you that Archbishop Whately has said, "the ablest philosopher may make an indifferent disputant, especially since the arguments which have led *him* to the conclusion, and have with him the most weight, may not, perhaps, be the most powerful in controversy." Nevertheless you must admit that your last remarks, which I have quoted, demand of you "to prove" more than you expected, or perhaps intended. I am, Sir, yours &c., DAVID WILSON.

Brook-street, Nov. 5, 1850.

[To the Editor of the Medical Times.]

SIR,—In virtue of my position as a homœopathic practitioner, I protest against the mode adopted in your columns to test the value of the law, "*similia similibus curantur*."

Earnest thought, untiring industry, self-devotion to the service of the recognised truth, were the means by which Hahnemann arrived at the knowledge of the law he announced, and its practical application to the cure of disease. Hahnemann indicates with precision the course which the student must with diligence pursue to arrive at a true knowledge of homœopathy.

All the results of scientific research demand, for their clear comprehension, certain method, regular discipline, strict adherence to the rule laid down by the discoverer.

The results of Hahnemann's labour have not received this at your hands, and neither letters nor leading articles can put your readers in a position to judge the value of the law in question. By the bedside of the sufferer,—with the proved drug, with the knowledge of disease,—is the true place to criticise the homœopathic law and test its value.

I do not come, as one of a cloud of witnesses, to overshadow your columns with my testimony of the matter, but in simple courtesy to suggest, that if you feel it to be your mission to fight this dragon, appoint a commissioner, intelligent and trustworthy, let him gather

together all the facts from the hospitals and dispensaries, and week by week weigh them diligently and in good faith, that if all prove rotten your readers may remain calm in their ancient faith; that if even one seed-grain of truth be found therein it may be rescued, and furnish wholesome food for their reflection.

Mankind has a wholesome horror of innovation, and wisely pause before they abandon old for new methods; truly considered, it is one of the conditions of progress, which would otherwise get into disrepute with the nations; and the conservative principle stands as a sentinel to demand the pretensions of the stranger before he is bid welcome.

I respect your opposition to homœopathy; as the editor of a journal of public instruction, it is your bounden duty to crush falsehood and expose humbug: but, for the honour of our common nature, be most careful that you stain not the white robe of truth, in haste of duty or heat of argument.

I would not write thus to your wretched contemporary; I alone appeal to men of honest purpose. I believe your desire is truly to benefit the medical profession in *your own* way, and I seek to be the instrument—in all humility I write—to indicate the true path.

I am, Sir, &c., T. Mackern, M.R.C.S.

Clapham-common, Nov. 11, 1850.

PERICARDITIS.

[To the Editor of the Medical Times.]

Sir,—Absence from home and other circumstances have prevented my replying to the letter of Dr. Kidd on Pericarditis, published in your journal of the 21st Sept., in answer to my communication of the previous week on the same subject. Referring to those letters, I now beg to offer the following remarks.

In what condition does the pericardium remain after having been the seat of acute inflammation, sufficiently intense in character to furnish a persistent friction sound during several days? Or, in other words, does acute pericarditis, evidenced by a friction sound, admit of perfect cure, or, does there remain thereafter a more or less impaired heart, with immense liability to a recurrence of the attack? This is the point at issue between Dr. Kidd and myself. Dr. Kidd seems to think perfect recovery to be the rule, while I believe recovery to such an extent to be so very rare, that out of a large number of cases carefully observed, I have not met with one illustration of it.

Dr. Kidd concludes his observations on my letter in the following passage—the meaning of the postscript I do not understand:—"I looked upon the case then, and do now, as one of *perfect recovery by absorption*. In a conversation to-day with Dr. Barlow he agrees with me; he saw no difficulty in the matter; nor, I must confess, do I. When Dr. Davis gives us something besides our old negative speculation—some diagnostic sign, besides the quickness of pulse, which in this case, by the way, told quite against him, I shall be most happy to modify my opinion; and we shall have both, perhaps, assisted in adding a new fact to our science. The mechanism of the absorption or disintegration of lymph is now so well understood in the schools here, and so clearly put forward by Mr. Paget, that, however venerable the old word 'impossible' may be in the perfect cure of pericarditis, we may now, perhaps, discard it; we see spots on the heart every day in *all kinds* of *post-mortems*, the result of these cases."

I did not use the word "impossible" in my letter, nor did I indulge in speculation of any kind, negative or otherwise. I cited my own clinical experience as opposed to the conclusion of Dr. Kidd, and expressed my belief that his view was unsupported either by clinical observation or by morbid anatomy. Now, I think it would have been more to the point, if Dr. Kidd had adduced some evidence from one or other or both of these sources, in support of his opinion, instead of indulging in a variety of vague generalities on the subject. I will now state some of the grounds on which my own belief is founded; and if that belief is erroneous, I have at least the satisfaction of erring in the best possible company, as two of London's greatest physicians are in the same predicament. Dr. Watson says, "It follows as a necessary consequence from these facts, that acute pericarditis, so far advanced as to occasion the pathognomonic rubbing sound, does not admit of a perfect cure." Dr. Latham says, "I am disposed to take it for a fact, that whenever inflammation of the pericardium has been enough to declare itself by symptoms, the detriment done never undergoes perfect reparation." My own experience is in perfect accordance with these views, and I may observe that there is no better opportunity of collecting evidence on such a subject than is furnished by a provincial hospital. In London, when a patient quits the hospital, he is generally lost sight of, and the chances are, that when again taken ill he will seek assistance from a different hospital, as being nearer his then abode or more convenient on some account, while here he has no choice but to return to the same hospital, and generally, if his malady is severe, to the same physician; so that there is a large number of persons who, month after month, and year after year, come under my care as hospital patients as regularly as they have any malady. I have careful notes of upwards of twenty cases of rheumatic pericarditis treated in hospital during the last five years. Many of these have come under my observation subsequent to their dismissal from hospital, some of them on several occasions, and two within the last week; in no instance have I failed to satisfy myself of the existence of an impaired heart. A young girl, Sarah Pullen, now twenty years of age, came under my care for the first time three years ago with pericarditis. She was dismissed in such a condition as would have been considered by M. Bouillaud or by Dr Kidd as one of perfect recovery. The pulse was of normal frequency, the heart's action natural and without abnormal sound of any kind; percussion indicated the absence of any effusion. Nothing could be more satisfactory so far; but as soon as she lost the quiet and repose of the hospital, and returned to her usual occupation, palpitation, a quickened pulse, and short breath, showed that the healthy action of the heart had ceased. This girl has been twice in hospital under my care since, with all the subjective symptoms of pericarditis, but without the objective sign. Why was the latter absent but because the pericardium had become adherent, and the rubbing sound a physical impossibility? Another young woman, Angelina Giles, was admitted at the commencement of this year with pericarditis, and was discharged in a condition of apparently restored health; she has, however, been subject ever since to palpitation on the slightest exertion, and during the last week she has again come under my care with the symptoms of pericarditis in unmistakeable perfection, but no friction sound. There is a young girl in hospital at the present time who has been under treatment for the last three months for pericarditis and its consequences; in her, instead of adhesion, there took place extensive effusion, which nature seems unable to remove. As soon as any attempt is made to introduce a more tonic regimen and treatment, first, inflammation seems to be lighted up; lately, the lungs have been threatened, and I believe she is about to become the subject of rapid tuberculosis. Two young men, one a porter with a wine-merchant, the other a blacksmith, came under my care with pericarditis about a year ago; both quitted the hospital free from all symptoms of disease, but both have had to quit their laborious occupation in consequence of constant palpitation and breathlessness on making any exertion. I could multiply examples of this kind to a considerable extent; they would, however, be merely repetitions; but I have not met with one case that tells a different tale.

There are abundance of cases on record where death has interrupted the process of adhesion; one such came under my own notice a few months ago. A man was admitted suffering under neglected pericarditis, and died in a few days. On dissection, the surfaces of the pericardium were found glued together, by means of a layer of soft lymph; on tearing them apart, a rough deposit remained on either surface. If recovery had taken place in this case, it would have been with an adherent pericardium.

Now, these are the grounds of the opinion advanced in my letter, and it behoves Dr. Kidd, in support of a contrary belief, to bring forward some evidence of a tangible kind. Dr. Kidd must either show some case where a patient has suffered from pericarditis, with the friction sound fully developed, recorded by a competent observer, and on the death of such patient it must be shown that the pericardium was healthy, free from adhesion, and free from effusion; or he must follow some patient, convalescent from pericarditis, into his usual occupation, and find him with a heart unhampered, acting freely and naturally under the labour and excitement of every-day life. The "spots" spoken of by Dr. Kidd do not meet the requirements of the case at all; it is probable that those among them which are the result of inflammation, are the result of a very chronic form, and there does not seem any ground for believing that at any period of their progress they are competent for the production of the friction sound. It is probable that a deposit of lymph, on both surfaces of the pericardium, is essential to the development of the rubbing sound, while this condition does not exist, as a rule, in the "milk spots."

A considerable portion of Dr. Kidd's letter is taken up in criticising my remarks on the treatment of the case in question; but Dr. Kidd seems to have misapprehended my meaning. I did not express any opinion as to the propriety or impropriety of administering mercury; I merely said, that if mercury was to be given with the view of controlling the effusion of lymph, I thought the sooner the system was brought under its influence the better; and, if it was not given with that view, I did not see why it was given at all. I

did not presume to dogmatise on the necessity of administering mercury in pericarditis, although I should always have recourse to it myself in the treatment of all primary attacks uncomplicated with renal affection.

Thanking you for your courtesy in inserting my previous letter,

I am, Sir, &c., WILLIAM DAVIS, M.D.,
Physician to the Bath United Hospital.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—They say that a worm will turn when it is trodden on. Now, Sir, your correspondent, "Spectator," has not only trodden on the Council of the Medical and Chirurgical Society, but he has done so in language which, applied to any individual member of the Council, in my humble judgment, would have summoned him or you, or both, into the Court of Queen's Bench. The terms "monstrous" and "devilish" are applied to the proceedings of the Council. Something which they do is likened to the "unclean oblation of a lie" —whatever that oblation may be, which I do not clearly understand. An indistinct hint is thrown out, that the proceedings of the Council of the Royal Medical and Chirurgical Society are dictated by Satan himself! The system under which the principal portion of the Society's affairs is worked is called, in one place, the "*ne plus ultra* of corporate folly;" in another, "a machinery which has excited no little indignation;" in a third, it is characterised as "revolting husbandry."

Now, Sir, this is either true or it is not true. If it is true, it is high time that the Council should reform; if it is not true, it is surely right that the readers of your widely-circulated journal should have their minds disabused, so that when they read the next horrifying lucubrations of your indefatigable correspondent, "Spectator," they may read

> "As Dutchmen read of earthquakes in Calabria,
> And never stop to cry, 'Alack a day!'"

And now, Sir, let me analyse somewhat more in detail this extraordinary *philippic*. The first circumstance worthy of note is the *fact*, that the Secretary who selects the two referees is generally a "*young man*." Now, youth and age are relative terms. You have doubtless read with infinite amusement that admirable letter of Montesquieu, wherein the same lady is made to be both young and old, according as the inquirer addresses himself to the ladies who are her juniors or those who are her seniors in the room. Now, Sir, from the circumstance of his calling Mr. Charles Hawkins, Dr. Cursham, and Dr. Baly, young men, I presume that he himself views them from the wrong side of 50—say 60. Dr. Cursham's age I do not know; but Mr. Charles Hawkins is 38, and Dr. Baly, having been a physician for fourteen years, can hardly be much younger. I have no doubt that all three consider it a great compliment to be called "young." Perhaps "Spectator" would kindly furnish the Council with the proper certificate of age which every new Secretary should be called upon to furnish.

Setting aside this minor offence, let us grapple with the main question which "Spectator's" last letter agitates—the good or the evil arising from the existing system of "*referring*" papers prior to adjudication by the Council. I appeal to any of your readers, not Fellows of the Society, if the tone and tendency of "Spectator's" letter is not to persuade *them* and the *Fellows*, and the professional public generally, that the Council of the Medical and Chirurgical Society follow *blindly* in the wake of the referees, rejecting what they reject, approving and publishing what they approve, having no will of their own, but perfectly contented to shift the onus and responsibility of judging of the merits of papers, and of their fitness for publication, from their own shoulders on to those of the referees. If this be *not* the drift of "Spectator's" paper, then have I read it in vain. Again, if this be the drift of his argument, then Sir, I am prepared to show cause why a "*rule for abusing the Council should not be made absolute.*" I am prepared to prove, that the opinions of the referees as to papers are never blindly adopted;—on the contrary, that they are deliberately read and carefully considered. When the statements therein made are clear and convincing, due weight is given to them. When the opinions therein held are less clearly given, or less conclusively established, then the opinion of the referees is put aside, or perhaps overruled; under no circumstances is it ever taken for *more than it is worth*.

As "Spectator" affects such intimate knowledge of the ways of the Council, perhaps he will, in his next letter, condescend to answer the five following queries:—1. In how many instances, during the past session, were the opinions of the referees assented to and adopted by the Council? 2. In how many instances were the opinions of the referees overruled by the Council? 3. In how many instances did the opinions of the two referees coincide, and in how many did they differ? 4. What steps did the Council take when the opinions of the referees differed? 5. In how many instances did the Council suspend their judgment on papers, for fuller and more precise means of arriving at a satisfactory decision on the merits than the opinions of referees gave?

When "Spectator," by his replies to these five queries, has proved himself competent to the task of criticising the working of the existing system, I will again address you, and, in the mean time, will prepare myself for testing the accuracy of his returns. I will not bring myself to doubt, for one moment, his capability to supply such information. No one, without such accurate statistics, would have ventured to comment, in such hyperbolic terms, on the "*Literary Star Chamber*" holding its sittings at No. 53, Berners-street!

Until those returns are furnished by "Spectator," I will venture very respectfully to ask your readers to withhold their judgment. Perhaps they may find, after all, that the system of referees is a very simple, innocent, but effectual method of gaining information—that the twenty-one members of Council adjudicate on papers with much less blind reliance on referees' opinions than "Spectator" seems to dream of; and, lastly, that a great deal of his indignation, and a very large proportion (query, the whole) of his hard words might have been spared, without any detriment to the five hundred and eighty-second number of your excellent journal.

I am not at all unwilling to declare myself, but, as "Spectator" fights under a mask, why I must do the same. I will be a little more explicit, however, than he is, for I avow myself

A FELLOW OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

London, Nov. 23, 1850.

[To the Editor of the Medical Times.]

SIR,—Your correspondent, "Spectator," in his communication respecting the Royal Medical and Chirurgical Society, contained in the *Medical Times* of last week, says: "At the late meeting, I hear that Dr. Webster had some most conclusive facts in regard to the Royal Society, but which the impatience of some, who seemed to like voting better than listening, afforded him no opportunity of stating, but with which, I trust, he will still favour the Profession." Being thus publicly appealed to by name, I shall feel obliged if you will allow me to reply through you columns, that I then intended to have mentioned, among the other reforms recently effected in the Royal Society, not the least important was the new system adopted in regard to references on papers, and the manner in which that most responsible duty is now performed by the Executive Council. During the last ten or twelve years a limited number of Fellows were chosen from the general body of the Society, and constituted select committees, to whom all papers read at ordinary meetings were referred, as to their fitness for appearance in the "Philosophical Transactions." Recently, these select tribunals have been abolished, and instead, every Fellow of talent or repute is now classified into seven sections, according to his qualifications; to two members of which, at least, the Council, at one of their meetings, assign each paper, requesting their opinions respecting its value and claims for publication. These documents having been read at a subsequent sitting of the Council, it is then decided whether the paper in question shall be inserted in the "Transactions." During the old regime, the referees' official communications were considered confidential, and seldom, if ever, became known beyond the Council chamber; at least, such was the understanding. Now matters seem managed differently, as not only the referees' reports are sometimes given to the author of a rejected paper for perusal, but the different parties have been even brought together to examine the grounds and reasons of that rejection. At the late special general meeting of the Royal Medical and Chirurgical Society, I intended to have stated to the assembled Fellows two instances of that description, although others might be quoted, in order to show the mode of proceeding sometimes adopted at the Royal Society, and which well deserves imitation. The first case was that of a very distinguished Fellow of the Society, at present filling a high position in London; but whose communication, lately read, was not recommended for publication. Here, the referees' reports were afterwards shown to the author; whereupon an interview took place at his own house, to investigate the reasons assigned for declining the communication. The other example is even more appropriate, seeing the writer was a member of the medical Pro-

fession, and had already contributed a paper which was ordered to be inserted in the "Philosophical Transactions." In this instance, after repeated interviews with the author, when the referees carefully went over the various observations, and also examined different preparations with the microscope, to ascertain the proofs brought forward to establish the asserted opinions and conclusions, they presented their unanimous report to the Council against publication. Nothing could be fairer than the impartial means thus adopted in both cases, to do justice alike to the authors, to the Royal Society, and to science. Even at the Medical and Chirurgical, where secresy is still the general order of the day, I have been informed, that not long ago a referee, in an elaborate report upon a paper which he had examined, after pointing out some faults it contained, and having made several suggestions, advised its publication on the conditions implied. These the author not only acceded to, but complimented the referee by saying, he thought the Society was much indebted to that gentleman for the trouble he had taken. Entertaining strong objections to secret reports, whether on scientific or medical subjects; and knowing, also, how advantageously an opposite method has worked at the National Academy of Medicine in Paris, besides being now occasionally followed by so eminent a body as the Royal Society,—often held up as a model for imitators,—and considering, further, that every author ought always to know the reasons why his paper is not deemed worthy of a place in the Society's "Transactions," I have been induced to answer "Spectator's" inquiry as above, in the confident belief the facts here recorded are both important and merit attentive consideration.

I am, Sir, &c., JOHN WEBSTER.

24, Brook-street, Nov. 25, 1850.

[To the Editor of the Medical Times.]

Vir bonus et prudens————
————————parum claris lucem dare coget,
Arguet ambiguè dictum, mutanda notabit,
————————————nec dicet, cur ego amicum
Offendam in nugis? Hæ nugæ seria ducent
In mala. HOR.

SIR,—Had it been necessary, the statement of the President of the College of Surgeons, referred to in my last letter, would have shed a very acceptable light, both on the working of the Royal Medical and Chirurgical Society and on the relations which exist between it and the College of Surgeons; but the light is so feeble when compared with that afforded by the united experience of mankind that it scarcely represents the proportions of a rushlight to the sun. Mankind have long been familiar with the fact which the President has volunteered to illustrate by his recent avowal, that man will often perform a part privately which they "decline acting" in public; and the lengthened category of illustrations afforded by experience have led mankind to the generalisation, that man is not to be trusted with irresponsible power.

Nobody doubts but that there are exceptions, and few would feel more pleasure than the humble individual who now addresses you in citing the President of the College as an example, did it not appear totally irreconcilcable with his own declaration. How far the desire of the President, that the duties of a referee should not be made public, may constitute him an exception of another kind, I have not at this moment the means of deciding; but he may rest assured that already some, and it is believed most of the referees require no such concealment in the performance of their duty as it would seem is a *sine qua non* with the President of the College of Surgeons. It is not easy to imagine a duty more honourable or complimentary than that assigned to the referees; but an honourable post, from which are detached the only satisfactory evidences of the manner in which its duties have been fulfilled, whatever it may appear to the President, is, I apprehend, Sir, to common sense and to most people, an unintelligible anomaly. It was said that inconveniences had arisen from the referees being known; but this is a piece of disingenuousness which gives rise to a serious fallacy. No plan of that kind which has, we understand, been urged by Mr. Macilwain and others, and since adopted, with perfect success, by the Royal Society, has been adopted by the Royal Medical and Chirurgical. The referees had been known to the Council, and the inconvenience which arose was, that a member of the Council mentioned what ought never to have been concealed. But whence the inconvenience? The Report? What did the Report say, then?—because this is absolutely necessary to any one who is to estimate the "inconvenience." That has not transpired. Now here is a distinction of great importance, and which might readily charge *some* plans with "inconvenience," but which would be not only far from impugning *the* plan of public reports, but would furnish the most emphatic argument for the necessity of them. For it requires no great penetration to perceive, that many inconveniences might arise if reports intended to be private were subsequently published. What are the objections, then, to publicity? We will first suppose that the Council do their duty by rendering that of the referee as much a thing of fact, and as little a matter of opinion, as is practicable. This is readily done, by requiring him to examine the facts of the author, the reasoning on them as correct or illogical, and the relation of the whole to the status of the question in science, and to matter already included in the "Transactions," and then to give, *not a decision*, be it marked, but an *opinion* only as to its publication, the decision resting with the Council. What can there be in all this requiring concealment? The very idea instinctively suggests distrust and suspicion. If, indeed, the duty be done in a slovenly manner,—if the tone be carping or uncourteous,—if the correction of faults be not suggested in a "do-as-you-would-be-done-by" spirit, plenty of "inconvenience" might and ought to arise; but this is the very danger against which publicity would be the most probable safeguard; nor is it too much to say that such is required. It is very well known that the reports have often been open to remarks of the kind here implied, and where they have not been assailable in tone, they have often enough dealt with the subject in so bald and imperfect a manner, as to have been neither creditable to the referee, nor just to the author, the subject, or the society. Were these reports made public, it is perfectly certain that they would, in many cases, in representing carefully digested status of various questions in science, be not only highly honourable to the Society, but almost invaluable, in the information they would convey to most Fellows of the Society, and perhaps to none more than those who were proposing to themselves to investigate further the subjects to which they might refer. As to any restraint imposed on the referees by the publication of their reports, it is impossible not to perceive, that, as regards all parties, (the Society inclusive,) they are of the most wholesome tendency; and here I would remark on another fallacy put forth by some opposed to publicity. It is said, that publicity might do very well in a mixed body like the Royal Society, but that the Profession is a "different thing." What this different thing is, the projector of this sophism did not explain; let me therefore endeavour, in admitting the difference, to show in what it lies. In a large mixed society, there is, under anything short of the most careless management, no danger of any conflicting prejudice or prepossession between the author and referee; but, in a society where most of the Fellows are of the same profession, and especially where the Council inexplicably render matters more difficult by unnecessarily restricting their choice, publicity becomes absolutely necessary to that comfortable confidence that an author will not be visited pique or cliqueism, instead of impartial justice. It is obvious that the danger of such influences is here indefinitely multiplied; and no man can deny, that wherever they exist, they must be equally opposed to the claims of justice and the interests of science. Again let me say, that the evils have not been imaginary,—"Murder will out!"

It was only the other day that Dr. Copland is reported as saying that a paper of his was sent *back without having been read;* he added, that this was twenty years ago. It is well known that similar things have happened much more recently. An author had a paper returned for abstract without previous perusal. The abstract was read; it is believed that it was referred to a referee who had published the so-called errors in practice which it was the main object of the paper to correct,—of course the paper was not published. Next year another paper, on an isolated point of the same subject, and an hour's reading in length, was presented by an influential surgeon of an hospital. It was read *in extenso*, and published. Now, it so happens that the other paper was published in another place, and I could direct the Profession to the authors, secretaries, &c., of the year; but it is of no use unnecessarily bringing names before the public, and I mention the matter only to show you, that if the system is bad the fruits are bad, and that "*aquilæ non generant columbas.*" Now, Sir, these things are indeed "inconvenient," and, for this reason, that they are "not right," and, however the President of the College may wish to perpetuate a secret system, he may be assured that it is short-lived; and that men are growing weary of that which, without exciting the talented, encouraging the diffident, or sustaining the industrious, depresses the majority by the withering influences of a distrusted cliqueism, and leaves the "Transactions," instead of being a repertorium of valuable matter, honourable to the Profession and the country, a channel sought chiefly as a convenient means for publication.

I am, Sir, &c., SPECTATOR.

HARE-LIP OPERATIONS.

[To the Editor of the Medical Times.]

Sir,—Having read the report of Mr. Fergusson's case of hare-lip in your number of the 2nd inst, I trust that he will not consider me presumptuous in relating a precisely similar one, operated upon by me in the month of July, 1845, performing the operation exactly as reported in Mr. Fergusson's case, with the exception of chloroform. The bony palate projected to such an extent that Dr. Shearman was afraid that serious consequences might result from its removal; however, after dissecting the integuments covering the projecting palate, I removed it with the bone-nippers, the only difference in the two cases being the age of the patients, mine being only *five months old*. The case succeeded remarkably well, and I feel confident that when Dr. Shearman, of Rotherham, and Mr. Henry Fisher, who were kind enough to assist me in the operation, see Dr. Westmacott's drawings, they will at once be reminded of the likeness of my case. The deformity was horrid; the child is now pretty-looking, but requires an artificial palate.

This case adds to the number of successful ones operated upon in infancy, "as recommended by Mr. Fergusson," and who will no doubt recollect my correspondence with him, both before and after my operation, on the case just referred to; also of my having sent him an outline of the deformity. I have to acknowledge that the success which has attended me in the performance of many formidable operations has been mainly dependent on the judicious and friendly advice—never withheld from me—of Mr. Fergusson.

I am, Sir, &c., George Woollam, M.D., &c.

Ashton-under-Lyne, Nov. 4, 1850.

ARTERIES OF OLD PARR.

[To the Editor of the Medical Times.]

Sir,—As the state of the arteries in a man (Parr) who died at the age of 152 is an interesting subject, I shall feel—probably in common with many others—obliged to Dr. Crisp for any notice of published statements respecting them,—such as he alludes to and promises to give in his note inserted in the last number of your journal.

If, as he believes, the arteries of Parr were ossified, it is strange that Harvey, whose attention was so much directed to the arteries, should, in his account of the *post-mortem* appearances, have passed over so important a circumstance, especially considering how particular he was in the mention of other parts—as the heart, "cor, magnum et crassum;" the cartilages of the sternum, "non magis osseæ, vel in ossis naturam conversæ quam in cæteris hominibus, sed flexiles et molles;" &c., concluding the description with the remark, "omnia denique interiora ita vegeta apparebant ut, si de consuetudine pristinæ vitæ nihil immutasset, aliquanto fortasse, diutius mortem distulisset." I quote from the College edition of Harvey's works. The account published in the "Philosophical Transactions" is therein called an extract, having first appeared in a work by Dr. Betts, published in 1669. At that time, and for many years before and after, these "Transactions" were the repertory of facts relating to the sciences,—not excluding that of medicine. I have consulted them, but in vain, in search of additional information respecting old Parr; and, equally without success, that other repertory of facts, Haller's "Elementa Physiologiæ." William Cowper, who in 1705 gave a paper to the Royal Society expressly on "Ossifications or Petrifactions in the Coats of Arteries," takes no notice of Parr's case.—I am, Sir, &c.

John Davy, M.D.

Lesketh How, Ambleside, Nov. 10, 1850.

MESSRS. LIZARS AND SYME.

[To the Editor of the Medical Times.]

Sir,—A regard to the principle of "*audi alteram partem*," I feel confident, will induce you to give a place in your columns to the following remarks, which I feel called upon to make, in answer to Mr. James Syme's letter, which appeared in the *Lancet* of the 16th inst., and in your number of the 23rd inst. Without saying a word in reply, I might, indeed, remain satisfied, that the *animus* which pervades the letter furnishes its own answer. Any one who can convert an important professional question into a subject of personal invective, only betrays evidence of a bad temper elicited in a bad cause.

With regard to the action of damages referred to by Mr. James Syme, a mind solely bent in the pursuit of scientific knowledge might perhaps have sought a different tribunal for its investigation than a court of law, in which, I need scarcely remark, the truth frequently constitutes libel. The decision of a court of law, where proof of the truth libelled is disallowed, affords no evidence of moral falsehood.

As to the appointment I formerly held of Professor of Surgery to the Royal College of Surgeons here, the fact is, that I acquired that office by a majority of votes in opposition to him, an active but disappointed candidate. This honour was the more gratifying to me, that it was conferred by the independent and unbought suffrages of my professional brethren, given upon an estimate of my qualifications, unaided by political intrigue or mercenary negotiation.

I have only further to state, that the communication which led Mr. James Syme to write the letter in question, and to which I refer, was written on public grounds entirely, and required facts, not abuse, for its refutation.—I am, Sir, &c.,

John Lizars,
Late Professor of Surgery to the Royal College of Surgeons, and Senior Operating Surgeon to the Royal Infirmary, Edinburgh.

Edinburgh, 38, Charlotte-square, Tuesday, Nov. 26, 1850.

MERCURY IN TYPHOID FEVER.

[To the Editor of the Medical Times.]

Sir,—As your Paris correspondent, and subsequently Mr. Denny, of Stoke-Newington, have referred to me by name, as one having authority in the London Fever Hospital, I beg to state, that I am in no way officially connected with that institution. I am indebted to the kindness of its medical officers alone for permission to take notes of their cases. The treatment has, in all instances, been conducted by the Physicians to the Hospital, Dr. Tweedie and Dr. Southwood Smith. If, however, it would not appear presumptuous on my part, Sir, I would express my conviction, that the treatment adopted in the cases I have reported was most judicious, and would recommend those who may fancy they have discovered some better mode of practice, to remember that the majority of those cases were treated by one of the most experienced practitioners in Europe—Dr. Tweedie. For any peculiarity of doctrine I hold, no one officially connected with the Hospital is *in any way responsible*. The opinions I have expressed are my own, and I also am alone answerable for the accuracy of the facts I have detailed.

I trust, Sir, that henceforth those gentlemen who do me the honour to notice my papers will remember that I am neither Physician nor Assistant-Physician to the London Fever Hospital.

I am, Sir, &c.,

W. Jenner,
Assistant-Physician to University College Hospital.

8, Albany-street, Regent's-park, Nov. 25.

P.S.—The statements in my papers are founded on hospital statistics. Mr. Denny must not consider the figures there given as indicating the mortality of typhoid fever *generally*. A *very* large proportion of mild cases are treated at home. In children, the mortality from typhus fever, I may observe, is not more than 2 or 3 per cent. Relapsing fever rarely, if ever, proves fatal to those under puberty; and febricula *per se* never causes death.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

33, GEORGE-STREET, HANOVER-SQUARE.

Saturday, November 23, 1850.

Dr. J. R. Bennett, President, in the Chair.

PAROTID TUMOUR.

Mr. Haynes Walton brought forward a case of parotid tumour.

A lady sought his advice in January, 1848, on account of a small tumour in the situation of the parotid gland, that had attracted her notice some few months back. As her medical attendant had applied to it all the substances that are supposed to have influence in reducing tumours without any good effect; and as it did not produce any inconvenience, he (Mr. Walton) had advised her to let it alone till it became painful, or showed activity in growth, and in the event of either to call on him. In six months she returned with suppuration over the tumour; the ab-

scess was evacuated, and the parts resumed their former state. The recurrence of such suppuration at intervals of about three months convinced him that the tumour was the offending cause. He, therefore, strongly urged its removal, but consent was not obtained till a very severe attack of suppuration, in the course of the last summer, shattered her considerably, and induced her to desire its removal. On the 20th of October, 1850, Mr. Walton operated, with the assistance of Mr. Coulson. A cast was exhibited to convey a correct idea of the form and outline of the swelling prior to operating. The tumour, after removal, was about the size of a chestnut; it seemed to be made up of a series of cysts, some of which contained granular matter; one or two larger ones, which were distended with a glairy fluid, were cut into during the reflexion of the skin. Mr. Walton had previously expressed his opinion to Mr. Coulson, that the mass contained cysts. The operation required great care, for the tumour was very tightly wedged between the ramus of the jaw and the mastoid process. There was but little bleeding during the operation, but secondary hæmorrhage ensued, apparently from the whole internal surface of the wound, and nothing that was tried to check it answered, except stopping the cavity tightly with scraped lint, and using strong pressure. The patient made a good recovery, and without there being the slightest facial paralysis.

Mr. Coulson read a paper on the

SUBCUTANEOUS BURSÆ, THEIR ANATOMY, PATHOLOGY, AND TREATMENT.

After giving a sketch of the discovery of the deep bursæ, he proceeded to say that of late years another system had been described, called the subcutaneous. Beclard, in his "Additions à l'Anatomie Générale, par Beclard," published in 1821, makes mention of some of these bursæ, calling them subcutaneous; but he does not seem to regard them as a system; on the contrary, he constantly confounds them with the deeper bursæ. At last, in 1825, Schreger published his excellent monograph "De Bursis Subcutaneis," in which he unfolds the nature, extent, and situation of these organs, and insists on their being received as one system, distinct from all others. Until this view be clearly comprehended, the pathology of these organs must ever remain obscure, and the treatment of their diseased conditions imperfect. These subcutaneous bursæ are situated in various parts of the body, immediately beneath the integuments of which they are an appendage. They are connected with, and belong to the subcutaneous cellular adipose membrane, being in no instance continuous with the deep bursæ, or the tendons, muscles, or bones which they protect. The structures entering into the composition of these bursæ are, first, the capsule itself; secondly, certain filaments traversing it; thirdly, folds or septa, being reduplications of the inner membrane, which may be either partial or complete; and, fourthly, small adipose corpuscular fringes. There is also the peculiar fluid secreted by the interior of the sac. In respect of their being shut sacs, intended to facilitate motion, and to protect opposing surfaces, and as regards also the fluid they secrete, these bursæ have analogies, no doubt, with the deeper bursæ. The subcutaneous bursæ vary somewhat in form, and even perhaps a little in their structure. In the axilla, for example, where they have probably the simplest form, they resemble the cells of a bee-hive piled on each other; in the order of simplicity of structure, those of the groin follow. The mode of formation of these bursæ in the fœtal state illustrates their varieties in the adult; for we find sometimes that the cellular tissue, in no way modified, takes the place of a properly developed bursa, and this is what exactly happens up to the fifth month of fœtal life. At other times, in the adult, we find them small or perfect, but contracted, which means that their development has been arrested. Even the anconal bursa, viewed by Schreger as the most perfect, has been found by other anatomists small, contracted, or scarcely perceptible. Pathological changes, also, by altering the condition of these bursæ, reduce them to the tissue out of which they were formed. Sometimes the interior is filled with a serous fluid, and the walls of the sac are thin and almost pellucid; at other times soft, flaccid, porous, and reticulated, and losing their cohesion; clearly indicating their retrogression to their primitive condition. The fluid secreted by and contained within the subcutaneous bursæ is held by chemists to be an aqueous solution of albumen, combined with saline matters. By the aid of the microscope, we learn that the epithelium common to all articular synovial membranes is absent in the interior of the subcutaneous bursæ. Mr. Toynbee examined some fluid taken from a carpal bursa, and found the gelatinous matter to consist of a transparent, viscid, semi-fluid substance, interspersed through which are rounded and ovoid cells, containing granular matter, and having one or two transparent nuclei attached to their inner surfaces. It would seem that, prior to the second month of fœtal life, these bursæ are open. A remark applicable to the entire system now described, is, that in youth, the capsule is thin and pellucid; as age advances, the bursæ become opaque and yellowish; blood-vessels abound on the exterior of the sac. The subcutaneous bursa with which surgeons are most familiar, is the one situated over the patella. This bursa, the patellar, as it may be called, is of a globular or rather oval shape, the base being usually limited by the extent of the bone. The walls of the sac in contact in the healthy state, are bedewed by a fluid analogous to what we find in the ordinary cellular tissue of the body, performing, no doubt, the function of synovia; like that fluid, as has been already mentioned, it is an aqueous solution of albumen, combined with saline matters. The epithelium investing the inner surface of the articular synovial membrane is not found in the interior of this or of any other bursa. The peculiar glistening fibres already described are found to stretch across at various points, forming septa or partitions more or less complete. In many persons two bursæ, and even three, have been observed developed over one patella, perfectly distinct from each other. The duplication or triplication of the bursæ is not confined to the patellar bursæ, but extends to others. In the popliteal space we usually find three subcutaneous bursæ,—an external, internal, and middle. The history of these is curious; with similar relations to all the others, they yet present, when enlarged, certain peculiarities. Both surfaces against which the enlarged bursa presses being comparatively soft and yielding, the swelling does not assume the distinct globular form which those situated over bones exhibit. There is usually a distinct bursa over each malleolus, but the external malleolar bursa is the one most liable to be enlarged or distended with fluid. At one time it was thought, that in club foot an accidental bursa was formed to protect the integument at the point of greatest pressure, but this notion has been distinctly refuted. A subcutaneous bursa, occasionally of considerable size, very generally exists over the distal extremity of the metatarsal bone of the great toe, close to the joint, and the term bunion has been applied to it when inflamed or thickened. Subcutaneous bursæ, corresponding to this system in their anatomical relations and character, are met with over the trochanter major and tuberosity of the ischium, in the groins, and in connexion with the lower part of the superficial fascia of the abdomen. Bursæ belonging to the system exist, also, as has been already mentioned, in the axilla and over the condyles of the humerus. The bursa which may be called anconal, as situated over the olecranon, is well known, and is often enlarged. There is also one over the distal extremities of the radius and ulna, and one on the carpus corresponding to the surface of the os magnum, which is often enlarged. There is a large bursa over the first joint of the thumb, and others, often double, over the first and second joints of the fingers. That bursæ exist in other parts of the body there is no reason to doubt. One is not unfrequently found under the integuments, at the angle of the jaw; and others, extremely minute, and rarely demonstrable, are said to exist under the integuments of the back, corresponding to the spinous processes of the fifth, sixth, and seventh cervical vertebræ. More extended pathological inquiries may enable us still to discover others; for it is by their accidental enlargement that the presence of some of them has become known to surgeons. The symptom to which naturally the surgeon first directs his attention, is the existence of an oval, colourless, elevated swelling in an unusual situation. Should he happen not to know of the previous existence there of an original bursal apparatus for the protection of the integuments, and for facilitating motion, he is at first lost in conjecture as to what the swelling may be. This has often happened. But, aware of the existence of the superficial bursæ, and of the localities they constantly occupy, the first glance at the case not unfrequently reveals to him all he requires to know. He need not, therefore, dwell on this symptom, remarking merely, that the tumour may be small or large, moveable, colourless, or deeply inflamed, or occasionally ulcerated on its surface, and discharging pus and serous-looking fluid; or, by long neglect and the influence of time, it may present itself to the surgeon as a firm unyielding tumour, without fluctuation or elasticity. Even when uncomplicated, the enlarged bursæ occasionally, though not uniformly, give rise to symptoms meriting attention in a history of these affections. A certain amount of inconvenience is often felt, varying in intensity with the volume, situation, and condition of the swelling. The enlarged anconal bursæ, for example, may attain a considerable size, and yet give rise to no more inconvenience than a slight sense of weakness after fatigue: even the patellar bursa may be enlarged without proving troublesome to the patient; but in others, and these perhaps form the majority, it is otherwise. Those in the hand, the carpal especially, cause a great sense of weakness; they are unseemly, and the deformity

becomes so unpleasant to the patient as to induce him to request the removal of the swelling at all risks. In like manner, those over the malleoli deform the foot, and cause other inconveniences. Much lameness often accompanies the enlarged patellar bursæ, whilst the enlargement of the bursa over the first joint of the great toe produces not unfrequently intense suffering; inflammation and suppuration follow; and death has been known to supervene in such a case, when injudiciously interfered with by the surgeon. Generally speaking, then, the symptoms indicating the presence of an enlarged bursa are sufficiently well-marked to lead to a correct diagnosis. A knowledge of the course of the tendons will enable the surgeon to discriminate between an enlargement of a superficial bursa, and that more troublesome and dangerous affection, the enlargement of the deep or profound, and he will regulate his treatment accordingly. These swellings, then, interfere with the free use of the limbs in which they happen to occur. The integuments may inflame and suppurate, and in this condition the case may for the first time be brought to the surgeon. If neglected now, they cause intense suffering. The cause of the pain is not uniformly the same. In the enlarged bursa over the great toe, for example, considerable pressure may be endured, provided a corn has not happened to be induced by that pressure over the enlarged bursa. When this happens the pain becomes intolerable, and is seemingly disproportioned to the other symptoms or appearances; but it is well to know this, for the partial removal of the corn by the knife will often give immediate and great relief. There is a symptom very generally present; it is a tingling sensation running down the limb; there is also a tenderness on pressure, amounting to pain and stiffness. All these symptoms merit attention. The position of the enlarged popliteal bursæ necessitates a careful diagnosis; they maybe mistaken for abscess, and for other still more dangerous affections. It is sufficient merely to caution the surgeon on this point. The detection of enlarged bursæ in the axilla and in the groins, and the discriminating them from other diseases, will require occasionally great attention on the part of the surgeon. Enlargements of the superficial bursæ have frequently no doubt been confounded with encysted tumours; their sequelæ also present difficulties in the way of a correct diagnosis, to be overcome only by a careful observation and history of the case. Enlarged bursæ may be either simply enlarged, or the enlargement accompanied with inflammation and all its usual appearances. Erysipelas may arise in the course of the disease, or at least œdema of the superficial fascia or cellular layer in which the bursæ are situated. The contained fluid, which in health merely bedews the surface of the sac, increases in quantity, and alters more or less in quality. Originally, perhaps, more complex than chemists suppose, (such at least seems to have been the opinion of Schreger,) it may undergo further changes, as a result of chronic or acute inflammation. At times the fluid resembles the outer layers of crystalline lens or the vitreous humour; that is, it partakes more of the character of a semi-solid than of a liquid; at other times it is much more fluid, or it is more serous, obviously less abounding in albumen. The semi-fluid substance has sometimes a yellowish appearance, at other times a reddish hue; sometimes it is very fluid, of a dark, dirty colour, the product, no doubt, of an inflammatory character. The sac may be wholly obliterated, or its walls so greatly thickened and condensed, as to represent a solid tumour; or the bursæ enlarged may show a dropsical character, with softening of the inner membrane, perforations and enlargements of traversing tendinous cords. The absence of many of these bursæ may depend, no doubt, on their obliteration in early years, the result of blows, pressure, or other accidental violence. The morbid appearances found in connexion with the enlarged bursa of the great toe have little or no reference to the bursa itself, but to the deformity caused by the simultaneous displacement of the metatarsal and digital bones of the great toe itself. Nevertheless, when, by a separation or spreading out of the distal end of the metatarsal bone, the head or extremity of the first metatarsal bone becomes so prominent on the inner side of the foot as to be mistaken for an osseous tumour, the integuments passing over it become much attenuated in those cases where the deformity occurs in the adult. If congenital, or occurring in early years, no such attenuation happens. The bursa itself, on dissection, presents a variety of morbid appearances, according to the progress made by the displacement of the metatarsal bone, and of the phalanges of the bone itself. The ligaments also undergo changes, but he could not say that he had ever observed the formation of accidental bursæ amongst their fibres. Fungous growths have been seen springing from the inner surface of enlarged bursæ; and ill-conditioned sores are also sometimes present, depending partly on the nature of the surfaces affected, partly on the constitution of the patient.

Causes.—A variety of causes likely to produce enlargement and subsequent disease of the superficial bursæ have been stated by systematic writers. Unfortunately, however, by confounding these organs with the deep bursæ and synovial sheaths of tendons, or by a meagreness of detail, many otherwise interesting observations have failed to improve our knowledge of the disease. The formation of accidental bursæ has been shown to be in every instance doubtful, whether on the prominent part of the spine in deformities of this column, or in any other part of the body. The inflammation and enlargement of the bursæ over the great toe, happen how it will, is merely an enlargement of a bursa already existing there, and not a new formation. Enlarged bursæ are frequently ascribed to severe pressure, sudden or long-continued; to blows, or other external violence; and to such a cause, no doubt, many cases may be traced. At other times, bursæ enlarge wholly independent of any such causes. It has been usual to speak of the enlarged patellar bursæ as "the housemaid's knee," of enlarged anconal bursæ as "the miner's elbow," &c.; but many causes of enlargement of these bursæ cannot be so explained. Thus, then, they not unfrequently originate without any assignable cause. It has been said that corns and bunions, (diseases very opposite in their nature, though, strangely enough, associated in surgical works,) and enlarged bursæ, ganglia, and tumours, and by whatever still stranger names these diseases have been called, are much more numerous among the rich than the poor. Of this, however, he (Mr. Coulson) had his doubts. The mechanical causes assigned for the production of the enlarged bursa over the great toe, and for the deformity of the foot so frequently preceding re-enlargement of the bursa, and giving rise to it, can be distinctly refuted. He alluded more especially to the theory, that such deformities and diseases are caused by tight shoes. It merits notice, that those who stand out most for the efficacy of mechanical causes in the production of such diseases, have uniformly avoided offering any explanation of the circumstance, curious enough in itself; but admitting of an explanation were this the place to offer it, that the disease just alluded to (enlarged bursæ in the deformed foot) appears first not unfrequently in one foot, and is even confined to that foot, be it right or left; whereas, if a rigid shoe were the producing cause, both feet ought clearly to be affected simultaneously. Again, when enlarged bursæ occur, which cannot be traced to any mechanical injury, it not unfrequently happens, that they occur at once in both limbs; this need not surprise us; the laws of symmetry go far to explain the occurrence. Some have carried the idea of the production of enlarged bursæ by accidental causes so far, as to include under the same category, the actual formation of the healthy sacs creating the system. They have also found bursæ in situations where he (Mr. Coulson) has never observed them: namely, around corns, and between these semi-horny productions and the true skin; but no such productions exist in so far as he has observed. Nor are they required to explain the intense suffering arising from pressure over a corn; the wedge-shaped body is at that moment slowly but surely growing inwards, piercing the true skin, and tearing its delicate structures asunder. Take off the pressure, or remove the offending wedge, and the pain ceases. It has been shown that many of the subcutaneous bursæ of the body are occasionally wholly absent, or, in other words, never were present. In this sense, then, they are not essential structures, at least not in these persons. But it has also been proved, that such bursæ, when enlarged, may be obliterated by pressure, or the same result may be effected by pressure and puncture combined, or by inflammation, suppuration, granulation, and consequent adhesion of surfaces; or, lastly, when losing their original character, they have attained, by means of fibrinous deposits, the appearance and nature of a solid tumour, they may be extirpated by the knife, and so altogether removed. These considerations, aided by a sound anatomy and physiology, which we owe chiefly to Schreger, led him to the adoption of a simple mode of treatment, applicable to most, if not to all, cases of enlarged bursæ. Let us first suppose that a case of enlarged bursa, unaccompanied with any other affection, no matter where placed, presents itself —that of the great toe need form no exception—an enlargement of the natural patellar, anconal, or malleolar bursæ; the question arises, How is it to be treated? Abundance of evidence exists to show that the treatment by rest and pressure, simple friction, blistering, friction with mercurial ointment, iodine, &c., all but uniformly fail in effecting a permanent cure. When these fail, recourse is had to a puncture, which, made with a lancet, amounts generally to a short incision; or an incision, more or less extensive, is made into the enlarged bursa, the contents evacuated, and pressure applied. This method no doubt succeeds, but it is unnecessarily severe, and is not unattended with danger, even in the uncomplicated class of cases. But it not unfrequently happens, that

before the surgeon has seen the ease, inflammation of the integuments and of the superficial fascia in which the bursa lies has set in with more or less severity. Now, in such eases the modes of treatment alluded to are clearly inapplicable, and have occasionally been attended with very serious results. Mr. Key, in an exeellent memoir on ganglia or bunion, distinetly refers to a case in whieh death happened from the incautious interferenee of the surgeon. He is speaking of the enlarged bursa on the great toe, which complaint, when complicated with the peculiar deformity already spoken of, he calls bunion. "I have known," he says, "gangrene of the foot and death ensue from opening an inflamed and suppurating bunion, (enlarged bursa of the great toe;) and, in three cases, exfoliation of the bones, with a most tedious and painful suppuration of the surrounding structures." He condemns all interference in such eases, in which opinion Mr. Coulson coincides, although maintaining very different views as to the nature of the affection from those of the distinguished surgeon just quoted. The mode of treatment he prefers to all others, is simply the puncturing of the enlarged bursa with a grooved needle, such as is used for exploring tumours and swellings of doubtful character. After the evacuation of the contents, pressure is applied by means of soap-plaster and bandage; this is renewed from time to time, and a puncture of the sac repeated if necessary. The results are uniformly a permanent and safe cure; if to these be added the almost painless nature of the operation, there is, in this mode of treatment, all that is satisfactory to patient and surgeon. When the enlarged bursa becomes seriously inflamed, we should endeavour, by rest and other means, to subdue the inflammation; nevertheless, a puncture such as has been described may be practised, even in these cases, with advantage to the patient. In cases of long standing, when the enlarged sac has put on the appearance of a sarcomatous tumour, excision is no doubt the remedy, having a due regard to the integuments. In complicated cases of this kind much must be left to the prudence and experience of the surgeon; sometimes the integuments over the bursa ulcerate; under these circumstances pressure may be employed, as in cases of simple puncture. The mode of treatment by the seton has been strongly recommended by many good surgeons, and he (Mr. Coulson) had adopted it with success; but a more enlarged experience has convinced him that this treatment, besides being tedious and unnecessarily severe, is not on all occasions unattended with danger. It is only applicable to those cases where the question arises as to their destruction by the seton, or removal by the knife. No cases of enlarged bursa have attracted more attention than that of the great toe. When painful and enlarged it is difficult to treat, for reasons already partly explained. So much confusion prevails in surgical works as to the true nature of the proper method of treatment of this troublesome bursa, enlarged and inflamed, that he hoped to be excused if he again directed attention to it. The bursa situated on this part may become enlarged and painful, like any other superficial bursa, and require for its relief and cure the treatment he had recommended; but that which in a peculiar manner complicates the pathology of this enlarged bursa is the accidental deformity caused by a projection inwards of the digital extremity of the first metatarsal bone, the phalanges of the great toe itself turning outwards to such an extent as to overlap or pass under those of the second,—a deformity, in fact, amounting to dislocation all but complete. As the metatarsal bone recedes more and more from the second, the digital extremity seems to enlarge, causing a remarkable prominence inwards of this part of the foot. In the mean time, as the deformity increases, the bursa is placed daily under a pressure more and more severe; the same shoe no longer fits the form of the foot, now much broader in the distal extremity of the metatarsal region; the bursa enlarges, becomes extremely painful; a succession of bursæ form on the same spot, they open, and perhaps suppurate; and cases are stated to have occurred in which the joint itself has been laid open, and caustic applied to the inner projecting portion of the metatarsal bone, as if it were a morbid growth. The disease, then, in its most aggravated form, that is, when complicated with this deformity, consists simply in an inflamed bursa, generally produced by pressure, with a partial dislocation of the great-toe, mainly dependent on a displacement inwards of the digital end of the metatarsal bone. As these two affections are quite distinct, though often confounded, the causes giving rise to the deformity need not here be inquired into; it will be sufficient to observe that tight shoes, or, rather, shoes no longer fitting the altered form of the foot, however they may give rise to an enlargement of the bursa, in no case produce the deformity: for it is now universally admitted that the deformity is often congenital, or comes on in very early life; that it occurs in hundreds who never wore shoes or boots; and that, even when present, it does not necessarily give rise to enlarged bursæ. The cases which most frequently come before the surgeon occur in persons who get the deformity after the meridian of life. The deformity takes place as a result of the weakening of those structures binding together the metatarsal bones; the larger one recedes from the second, and the muscular forces, acting on the great toe, assist in adding to the deformity, by causing it to approach the others. The treatment of such complex cases is exceedingly difficult; it is here that rest in the recumbent posture becomes absolutely necessary; the inflammation must be subdued, or allowed to subside; should a corn have formed on the enlarged bursa, it had better be cautiously pared down, as the skin has probably become much thinner over the bursa. When the foot has become tranquil, other questions arise as to the treatment, chiefly bearing on the form of the shoe; a boot, properly made, of very soft leather, such as is worn in France, may be used without aggravating the complaint; shoes, he thought, were bad, as they necessitate a somewhat tight ligature over the instep; this causes intense pain immediately below it, or nearer to the toe. In time the integuments may and do become accustomed to the form of the foot, and the bursa no longer enlarges. This is the ordinary course of events, even in cases, by no means infrequent, where the deformity has proceeded to its greatest extent; when the deformity is natural to the person, the bursæ do not generally enlarge, and therefore give little or no trouble.

In the course of the discussion that followed, great praise was bestowed on Mr. Coulson's paper, which, it was said, filled up a *lacuna* in surgical literature, the diseases of the bursæ having been touched upon hitherto by Sir B. C. Brodie only. The treatment by puncture, and the subsequent application of pressure, was highly commended; but some of the speakers were inclined to have recourse to blisters in the chronic form of the disease, and, when suppuration has taken place, to treat it on the same principles as a common abscess.

Mr. Canton strongly urged the utility of a subcutaneous puncture in enlarged bursæ.

MEDICAL NEWS.

Epidemiological Society.—The Royal Medical and Chirurgical Society have hospitably granted permission to this infant Society to hold its meetings at the Society's house in Berners-street, till the end of the present session, when it is hoped that it may be in a position to have a home of its own.

Military Appointments.—2nd Dragoon Guards, Assistant-Surgeon Alex. Forteath, M.D., from the 37th Foot, to be Assistant-Surgeon, vice Smith appointed to the 37th Foot.—37th Foot, Assistant-Surgeon Alexander Smith, M.D., from the 2nd Dragoon Guards, to be Assistant-Surgeon, vice Forteath appointed to the 2nd Dragoon Guards.

Naval Appointments.—Assistant-Surgeon Wm. Fasken, M.D., (1843) to the Chatham division of Royal Marines.—Chas. Sayer Hugo (1847) to the Atholl troop-ship at Sheerness.—Jas. Holt (1847) to the Locust steam-vessel at Woolwich.—John L. Trousdell (1847) to the Victory flag-ship at Woolwich.—Assistant-Surgeons John Jeffcott (1842) from the Trafalgar, 120, at Sheerness, to the Ocean 80 flag-ship at Sheerness.—David L. Morgan (1846) from the Cumberland, 70 depôt ship of ordinary at Chatham, to the Trafalgar.

Obituary.—On the 22nd inst., at 72, Upper Berkeley-street, Portman-square, Dr. John Taylor, late surgeon in the army, in the 80th year of his age.—On the 12th inst., by suicide, John George Simes, late surgeon at Hungerford, aged 33.—At Demarara, on the 11th ult., John M'Lagan, M.D.—On the 5th inst., at Birmingham, J. Gilby Davis, Esq., surgeon, aged 42. His death was caused by mortification, following a punctured wound in the thumb, received in opening a body.—On the 5th inst., at Manchester, Thomas Dorrington, Esq., surgeon, aged 33. He was a Member of the Council of the Provincial Medical and Surgical Association.

An erroneous statement having appeared, that the assistant-surgeon of Her Majesty's ship Vengeance, 84, at Portsmouth, had not been allowed a cabin, it is but justice to her gallant commander to state, that the assistant-surgeon was actually admitted to the ward-room before he was so entitled, as he had not at the time passed; and he also has, and has had, a cabin in the after cockpit.

A Document just issued by the order of the House of Commons shows, that the expenditure of the medical establishments under the Poor-law in Ireland, for the year ending the 25th of

March last, was 177,039*l.* 11s. 9½d. The total number of hospital patients during the year was 468,028.

The Royal Dispensary for Diseases of the Ear.—The funds of this institution were recently added to to the amount of 52*l.* 7s., the results of a charity sermon preached at St. George's, Hanover-square.

The Fifth Annual Report of the Commissioners in Lunacy is just published; it appears from it that the total number of lunatics on the 1st of January last was 15,079; of which number, 11,305 were paupers, and 246 criminals.

Professional Prizes.—At the request of numerous correspondents, requiring information respecting the various prizes open for competition to members of the Profession, together with the terms and conditions of each, we subjoin the following:—

The Collegial Triennial Prize of fifty guineas, on "The Functions of the several Parts of the Large Intestines in Animals of the class Mammalia."

The Jacksonian Prize.—The subject for this annual prize, founded by the late Samuel Jackson, Esq., is, "The Causes, Diagnosis, and Treatment of Obstructions of the Intestines within the Abdomen." The dissertations for the above prizes must be sent, addressed to the Secretary of the Royal College of Surgeons of England, before Christmas Day, 1851. Fellows and Members of the College only may compete for these prizes, not members of the Council, or other members of the Profession. The award is made for the former about June, the latter in April.

The Astley Cooper Prize.—The subject for the fourth triennial prize of three hundred pounds, under the will of the late Sir Astley Cooper, Bart., is, "The Structure and Use of the Spleen." This prize is open for competition to the whole world, and, if written in a foreign language, the dissertation must be accompanied by an English translation, and sent to Guy's Hospital on or before January 1, 1853. None of the officers of the institution, or any person related by blood or affinity to any such officer for the time being shall be allowed to claim the prize.

The Fothergillian Prize.—The subjects for the Fothergillian gold medal, offered for competition annually by the Medical Society of London, are, for March, 1851, "On Phthisis;" and for March 1852, "On the mode in which Therapeutic Agents introduced into the Stomach produce their peculiar effects on the Animal Economy." An additional Fothergillian gold medal will also be offered for competition in March, 1851, for an essay on "Uterine Hæmorrhage." The Medical Society of London also offers for competition two silver medals annually, one to be given to a Fellow, and the other to an honorary or corresponding member, or to any author not a member who may contribute a paper during the session considered worthy of that distinction.

The Actonian Prize, of one hundred pounds, will be awarded in the year 1851, for an essay, illustrative of the Power, Wisdom, and Beneficence of the Almighty on the Physiology of any one of the Senses—Hearing, Seeing, Tasting, Smelling, and Feeling. The essays must be sent to the Royal Institution, on or before the 31st of December next, and the adjudication will be made by the managers of the Institution on Monday, April 8th, 1851.

The Royal Society.—The Council of this institution propose to give one of the Royal medals, in the year 1852, for the most important paper in Physics, and another for the most important paper in Geology or Mineralogy. These papers must be communicated to the Royal Society after the termination of the session in June, 1848, and prior to the termination of the session in June, 1851.

The Blane Medal, founded by the late Sir Gilbert Blane, is awarded by the Council of the Royal College of Surgeons, on the recommendation of the Director General of the Medical Department of the Royal Navy, to the surgeon in the service who shall keep the best record of cases occurring in his practice on board.

The College Studentships, established by the Council of the Royal College of Surgeons for the cultivation and extension of human and comparative anatomy and physiology, by means of the opportunities afforded at the College in the preservation and enlargement of the museum and in the various scientific labours connected with that department, are held by two students, for a term of two years, at a salary of one hundred pounds per annum; and, if considered worthy of distinction, an appointment in the army, navy, or Hon. East India Company's Service, is presented to the retiring student. The rules, &c., can be had at the College. The regulations for competing for prizes are, generally speaking, the same, or nearly so, in all institutions, viz., no competitor may affix his name to the essay, which is only to be accompanied by a sealed envelope containing his name and address, and superscribed with a motto corresponding with that on each paper and preparation. The successful essay, generally speaking, becomes the property of the institution giving the prize.

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·960	43·2	37·9	— 0·4	W.S.W.	S.W.	Miles. 85	0·00	Nothing shown throughout the week.
Monday	29·622	45·2	40·6	+ 1·7	S. & S.E.	S.E.	160	0·39	
Tuesday.....	28·902	50·2	42·9	+ 6·7	S.S.W.	S.W.	260	0·10	
Wednesday.	28·667	46·9	44·8	+ 3·5	S.S.W.	S.W. & N.	180	0·15	
Thursday...	29·465	43·4	38·6	0·0	N.	W.N.W. & S.W.	85	0·06	
Friday	29·421	48·7	48·1	+ 5·3	S.S.E. & S.	S. & S.W.	235	0·20	
Saturday ...	29·341	49·6	47·0	+ 6·1	S.W.	S.W.	245	0·12	
Means ...	29·340	46·9	42·8	+ 3·0	S.W.		SUM 1250	SUM 1·02	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

SANITARY CONDITION OF LONDON.

In the Ninth Annual Report of the Registrar-General, issued in 1848, that authority speaks as follows:—"In London, the deaths at the close of June, 1846, from diarrhœa, dysentery, and common cholera, rose to forty weekly, and have since increased. Nor is that to be wondered at. Notwithstanding the improvements effected when cholera was last epidemic, the foul untrapped sewers and the ground areas of the best streets emit noisome smells and volatile poisons, which are as fatal as arsenic to a certain number of persons. London is surrounded, too, by *stagnant, putrid ditches*, as some cities are by walls. It would be well not to wait carelessly until cholera reaches the country, but to 'look before,' remove these nuisances, and purify the reeking atmosphere, which gives the disease breath, life, and being."

These "stagnant, putrid ditches," however, had already been the subject of evidence given before the "Metropolitan Sanitary Commission" in 1847; and Mr. Bowie then stated, with reference to Bermondsey and Rotherhithe, that the sanitary condition of the population was very bad, the land lying low, being very ill-drained, and *abounding with foul ditches*. He then shows, that such places are the strongholds of typhus, and says, that in case cholera should re-appear, these are the places where he should expect to find it.

Such was the opinion of a medical man in the year 1847. As is too well known, the cholera did re-appear in 1849; and it was proved to demonstration, that the locality of typhus was also the locality of cholera; that the neighbour-

hood of "stagnant and putrid ditches" was the place where it revelled, and that the Parliamentary witness and the Registrar-General spoke not as mere prophets, but with scientific accuracy, when they augured as they did; for the result shows that, comparing all the districts of London, the deaths from cholera being on the north side of the river 42 in 10,000 living, and on the south side 124 in 10,000, yet that in Bermondsey no less than 194, and in Rotherhithe 268 human beings died in every 10,000; while the Weekly Returns of 1849 showed that hundreds of these deaths occurred near and about the abominable tidal ditch on Jacob's Island, Bermondsey. In the Return for the week ending September 1, 1849, Mr. Martin, the registrar for the district, says:—"It will be observed that six of the deaths registered this week have occurred on the banks of the disgusting tidal ditch so often reported, now rendered more offensive than ever, from a great length of its narrow part having been covered in; nearly all the refuse from the poorest houses having accumulated at that part of the ditch near to the new water-pipes, and where, under the window of a typhus patient of mine, might have been seen the bodies of thirteen dead dogs and cats in one day this week, besides other offensive matter. As district surgeon, I have, with great respect, but perfect sincerity, warned the authorities of the fearful and tremendous responsibility they are incurring." Week after week, in that same year, were reports of the above nature published respecting that locality, and the cholera, as we have seen, did its worst there.

When men's minds became more settled as the cholera succumbed, we might expect that the experience gathered during its ravages would be turned to good account, and that London now (a twelvemonth after) would know nothing of "stagnant, putrid ditches"—especially such as the tidal ditch on Jacob's Island. This would be a very natural inference, making all allowance for the imperfections of human nature. Yet, so far is it from being the fact, that even up to the time we write the Registrar-General's Weekly Returns teem with the disgusting details of disease and death hovering over this very spot, and daily sending its victims to an untimely grave. Here is our proof:—

August 10, 1850 (10 months after the cessation of cholera):—"In St. James, Bermondsey sub-district, at William-square, the son of a rope-maker, aged 5 years, died of scarlatina (4 weeks). Mr. Martin states, that 'this is the second death in one week in the same room, which is very small. Six persons slept therein. Another child is likely to die. The house is situated on a tidal ditch, (Jacob's Island). There is neither outlet, drainage, nor sweet water. *This part of the tidal ditch is worse than ever.*'"

Again, on August 17, 1850, the Registrar-General reports as follows:—

"In St. James, Bermondsey sub-district, at 1, James's-court, the son of a labourer, aged 18 months, died of hooping-cough (5 months), pneumonia, sloughing from blister (3 weeks). Mr. Martin, the registrar, states, that 'this child lived on Jacob's Island, near to the scarlatina cases reported last week; he attributes its death to the concentrated poison existing in the court.'"

Again, two weeks after, we have the following:—

"In St. James, Bermondsey sub-district, at 5, William-square, the son of a rope-maker, aged 4 years, died of scarlet fever and dropsy. Mr. Martin states, that 'this is the third victim to the tidal ditch, all children of one woman, and died in the same room.'"

—And yet another! Two weeks more, and we have—

"In Bermondsey, St. James, at 4 William-square, the son of a labourer, aged 2 years, scarlatina, 14 days. Mr. Martin states, that 'this is the fourth child within a month which has died from scarlatina, under the same roof, on the tidal ditch.'"

And yet more!

Oct. 5.—"A death from scarlatina occurred in Mill-street, St. James, Bermondsey; and Mr. Martin, the registrar, observes, that out of *ten* deaths which he registered during the week, six, arising from various diseases, occurred within a few yards of the tidal ditch, Jacob's Island, '*yet the intolerable nuisance remains unabated.*'"

The very next week, however, brings with it yet more fatality on this polluted spot:—

Oct. 12.—"In St. James, Bermondsey, at Providence-buildings, on the 8th of October, the son of a labourer, aged 4 months, died of pneumonia (10 days.) Mr. Martin describes this as 'a close court on *Jacob's Island*, where the drainage is very bad.' *Also* at 3, Caroline-court, on the 4th of October, the son of a labourer, aged 9 months, died of chronic diarrhœa. 'This is a narrow court on Jacob's Island; the drains overflow, and the house is rendered so offensive, as to compel the inmates to keep their door open, though it is within 4 feet of the privy. It is remarkable (adds the Registrar) that *all the seven deaths registered last week occurred in localities where cholera prevailed most severely last year.*'"

Such are some of the statements which are week by week published, through an authoritative channel, and which show that in a particular spot where "the cholera prevailed most severely last year," that "yet an intolerable nuisance remains unabated," producing effects on our labouring population enough to reflect disgrace on any community. Were we reading the records of some brutish heathen nation, we might perhaps expect not much better; but that such things can appear month after month, and year after year, upon the public records of a Christian nation, while we do nothing or worse than nothing to cure the evil, is beyond comprehension, especially in a nation professing such jealousy of preserving its *religion* unstained, and at a time when it is about to invite all nations to witness and marvel at its grandeur.

This much in respect to one locality of one district in London. Next week we shall prove that a similar state of things exists in one or more districts in another direction.

HEALTH OF LONDON DURING THE WEEK.

The present Return exhibits a sudden increase in the deaths of London, and a greater mortality than in any week since the beginning of April. The deaths registered in the two previous weeks were 921 and 908, but rose in that which ended last Saturday to 1016; and they now exceed the actual average for the 10 corresponding weeks in 1840-9, which is 977, but fall short of the average as corrected for probable increase of population, by which it is raised to 1066. The present increase, as might be expected from the season of the year, is observed to proceed from diseases of the organs of respiration, with the exception of phthisis, or consumption. Pneumonia was fatal in the preceding week in 56 cases, last week in 94, of which 69 were amongst children; but it has not yet attained the average. Bronchitis was fatal in 77 cases, of which nearly two-thirds were among persons of mature years, and it continues to exceed the average. On the other hand, consumption, which numbers 111, has declined on the previous week, and does not show the same disposition, with other affections of the respiratory organs, to be aggravated by atmospheric changes.

MORTALITY TABLE.

Deaths in the week ending Saturday, Nov. 23, 1850.
(Metropolis.)

Causes of Death.	Nov. 23.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	461	346	208	1016	9770
Specified Causes	461	346	208	1016	9710
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	152	37	14	203	2165
Sporadic Diseases:					
Dropsy, Cancer, and other Diseases of uncertain or variable seat	6	27	16	49	550
Tubercular Diseases	47	98	8	153	1576
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	60	34	40	134	1126
Diseases of the Heart and Blood-vessels	4	20	14	38	318
Diseases of the Lungs, and of the other Organs of Respiration	104	56	41	201	1828
Diseases of the Stomach, Liver, and other Organs of Digestion	25	25	9	56	586
Diseases of the Kidneys, &c.	2	11	5	18	82
Childbirth, Diseases of the Uterus, &c.	...	7	2	9	108
Rheumatism, Diseases of the Bones, Joints, &c.	3	5	...	8	74
Diseases of the Skin, Cellular Tissue, &c.	2	...	2	4	7
Malformations	7	...	...	7	28
Premature Birth and Debility	16	3	...	19	209
Atrophy	17	...	1	18	144
Age	...	...	48	48	580
Sudden	7	4	2	13	100
Violence, Privation, Cold, and Intemperance	9	22	6	38	229
Causes not Specified	...	...	...	...	60

The Deaths in the several Districts are as follow :—

Districts.	Population in 1841.	Nov. 23, 1850.	Sum of Ten Weeks.
London...	1948369	1016	9770
West	301189	163	1452
North	376568	176	1700
Central...	374199	148	1800
East	393067	239	2308
South	503346	290	2510

The following is the number of Deaths occurring from some of the more important special causes :—

Apoplexy	28	Heart	32	Phthisis	111
Bronchitis	77	Hooping-cough	25	Pneumonia	94
Cholera	1	Hydrocephalus	26	Scarlatina	41
Childbirth	5	Influenza	3	Small-pox	11
Convulsions	44	Liver	6	Stomach	5
Diarrhœa	18	Lungs	12	Teething	14
Dropsy	19	Measles	26	Typhus	47
Erysipelas	7	Paralysis	22	Uterus	1

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	708	492	216
Females	673	524	149
Total	1381	1016	365

TO CORRESPONDENTS.

Communications for publication have been received from—

Mr. Stanley, of Brooke-street; Mr. Wilde, of Dublin; Professor Lizars, of Edinburgh; The Registrar-General; Professor Owen; Dr. Snow Peck, of Langham-place; Mr. Sealy, of Swindon, with a drawing; Mr. Milton, of Jewin-street; Mr. Hore, of Shoreham; Mr. Grove, of Wandsworth; Dr. Dudgeon, of Gloucester place; Dr. Roe, of Plymouth: Mr. Waldron Bradley, of Kidderminster; Dr. Kidd, of Kingsland-crescent; Mr Charles Verral, of Holles-street, Cavendish-square, with a drawing; Mr. Bulley, of Reading; Dr. Rooke, of the Dreadnought Hospital Ship; A Staff Surgeon, S.C.; A. B.; A Subscriber; Plebicola; H. H.; A Subscriber; Subscriber; An Old Subscriber; Dr. Rees, of Finsbury-square; Mr. Utermarck, of Stafford; Mr. Tucker, of Berners-street; Dr. Barker, of Bedford; Dr. Turley, of Worcester.

Communications are in type from Dr. Hutchinson: Mr. Henderson; Mr. Pincott, of Ongar; Mr. G. Brutton Willing, of Hampstead; Dr. Dudgeon, of Gloucester-place; A Practitioner in Durham; and others.

New Remedy for Extreme Length or Shortness of the Human Body.

[To the Editor of the Medical Times.]

Sir,—The inconveniences of too great or too small a stature in the human subject are very considerable. This is a matter to which I have long devoted almost exclusively my professional attention, and I am now happy, through the medium of your excellent weekly publication, to announce the remedy, which I have invariably found to succeed, in counteracting extreme human elongation, or its reverse, extreme curtation. It is, in fact, ginger.

Some sceptical people may be disposed to smile at the announcement of so well-known a substance possessing the power, if properly applied, of lengthening or shortening the human stature to the extent of six, and, in some instances, of not less than twelve inches; but the numerous cases which have fallen under my observation, and, indeed, I may now say my every-day's experience, demonstrate the happy result of this extraordinary discovery.

The manner of applying ginger for the purpose of reducing inordinate elongation, or, on the contrary, of lessening too great curtation, is shortly as follows:—The substance is applied in fine powder, sprinkled on one side of a brick-bat, which is to be rubbed strongly for half an hour on the soles of the feet, if it is intended to increase the length of the patient, and on the shaven crown of the head if his or her length is to be reduced. To exceed half an hour in the application, I must observe, is highly dangerous; the remedy being so powerful in its effects, that a person might either grow or shrink, as the case may be, and the soles or crown be chosen for the *locus medicationis*, that his or her friends might feel a difficulty in recognising the individual; and, as the amount of longitude gained or lost by the use of the remedy is permanent, and cannot, by any counter application of ginger, be changed, it is proper, especially for young practitioners, to be wary in the use of this potent means, till, by experience, they have acquired a sufficient tact to hit the proper point, and to go no further.

I have just space to add, that I have also made some very remarkable discoveries respecting the powers of pepper and mustard, which I hope to communicate at an early opportunity. Butter, you may be sure, has not escaped my searching inquiries.

I am, &c.,

L. Lubnruta, M.D.

Catch'em-square, November 22, 1850.

[We did not give insertion to a somewhat similar proposal of Dr. Turnbull's, for the cure of short-sightedness. Our brethren of the Medical Press were, however, less scrupulous, and the Doctor's letter appeared *simultaneously in three weekly medical journals.*]

Dietary at the Hahnemann Hospital.

[To the Editor of the Medical Times.]

Sir,—From the injunctions so explicitly laid down in the "Organon," relative to the "medicinal virtues" of a globule remaining "unimpaired for years," so much so, that if a patient "smelled" it, he would receive the benefit thereof, I verily believe that the following receipt for Homœopathic soup, as used in the Hahnemann Hospital, is no joke, but a reality:—

Take a robin's leg—mind, the drumstick merely—
Put it in a tub, filled with water nearly.
Set it out of doors, in a place that's shady,
Let it stand a week—three days, if for a lady;
Drop a spoonful in to a five-pail kettle—
Which should be of tin, or any baser metal.
Fill the kettle up, put it on a boiling,
Strain the liquor well to prevent it oiling.
An atom add of salt; for thick'ning, one rice kernel;
And use to light the fire, the "Homœopathic Journal."
Let the liquor boil, half an hour—no longer;
(If it is for a man, of course you'll make it stronger).
Should you now desire that the soup be flavory,
Stir it *once* around with a stalk of Savory.
When the broth is made, nothing can excel it,
Then three times a day let the patient smell it.
If he chance to die—say 'twas nature did it;
If he chance to live—give the soup the credit.

I am, Sir, &c.,

$$X \frac{1}{100,000,000,000,000,000,000}$$

A Subscriber, Butley.—1. A register of births and deaths in London is published weekly by order of the Registrar-General. 2. We think he might obtain payment for the service by applying to the Poor-law Board. We do not see that any equitable distinctinn can be drawn between vaccination done *in* the house and *out* of the house. 3. Our correspondent is fairly entitled to his fee.

A. B.—Peltier's Atmospheric Inductive Electrometer would suit our correspondent. It can be obtained from Messrs. Horne and Thornthwaite, Newgate-street.

Justitia.—We do not think that any benefit would accrue from the publication of our correspondent's note, especially as the documents recently issued by the Institution alluded to are somewhat enigmatical, and the advantages of membership are yet "*in nubibus.*" Could not a union of rival interests be effected?

A Subscriber.—A practice of the character stated by our correspondent, with six month's introduction, might be worth £800. The rule is, to fix the purchase-money at one year's value, for an entire business, and two years' value of the moiety bought, for a partnership.

An Old Subscriber.—The wily impostor who dubs himself "Doctor," professes only to compound and sell "the best and purest medicines, always fresh." As the matter at present stands, the Apothecaries' Society could not punish such an offender; but we advise our correspondent and his Manchester brethren to keep a watchful eye upon the intruder, and to take him before a judge of a County Court on the occurrence of the first act of practice that can be proved against him. Though his medicine may be always fresh, yet he will find that the puff of giving "advice gratis" is rather stale, and will not screen him from the just penalties of a Court of Law.

[To the Editor of the Medical Times.]

Sir,—Allow me to call your attention to one of the grossest systems of quackery ever practised. I term it so because it is carried on by some of the profession itself. I allude to the practice prevalent in the manufacturing districts, of allowing unqualified assistants to visit and take upon themselves the whole responsibility of the most dangerous cases—men who have never entered a medical school or hospital walls, and are totally ignorant of the first principles of pathology. It is no uncommon thing to see these young gentlemen dashing about the country in their masters' gigs, with all the consequence of the first medical men in the land; whilst striving young surgeons must be content to foot it through mud and rain to gain the bread which is unjustly taken from them,—not by the assistants, for the masters pocket the money, and console their younger brethren by assuring them that "every dog has his day."

The lower classes are so lamentably ignorant that they cannot discriminate between the well-educated young surgeon of the present day and the ignorant but dashing assistant, who generally possess the dangerous confidence of "a little learning."

The Poor-law Commissioners will not allow an M.D. (Edinburgh), and M.R.C.S. (London), to become a parish surgeon, yet are they aware of the scores of paupers annually committed to their graves, whose sole medical attendance has been rendered by a man possessing no qualification whatever? We constantly hear of assistants in the Army and Navy; but how careful are the Army and Navy Boards to ascertain that they are well-educated surgeons; they are even made to pass an additional examination. Are, then, the lives of Her Majesty's subjects in the Army and Navy more precious than in civil life? Some of these assistants become chemists and druggists, and they cannot understand how it is that they are not just as well qualified to attend midwifery cases and visit patients as in the days when they dashed about in their gigs, and were styled "doctors,"—a cognomen which they sometimes still retain.

I do not make these remarks from any ill-will towards non-medical assistants,—far from it: they are rather a class to be pitied, for they lead a laborious life, and their salary is generally barely sufficient to clothe and defray necessary expenses. But I do most seriously put the following questions to their masters. If you do employ visiting assistants at all, why not surgeons? Do you not perceive that in so doing you are lowering the Profession in public estimation? Are you not conscious that you are deceiving the Poor-law Commissioners, who strictly define the qualifications of those whom they allow to attend the sick under their care, who cannot choose for themselves? Lastly, would you, if attacked with severe illness, be content to trust your lives in the hands of your own assistants? I leave it to your consciences to reply. In the *Lancet* of August 10 is a letter from an assistant, who does not hesitate to talk of his principal residing at a distance of five miles from him, and of his dissolving partnership, &c.

H. H.

[The subject referred to by our correspondent is of considerable importance, and has already commanded the serious attention of the Poor-law Board.—Ed. *Medical Times.*]

ORIGINAL LECTURES.

CLINICAL LECTURES ON SURGERY,

AT

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.,

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

LECTURE II.

In my last lecture, gentlemen, I brought before you a case of traumatic tetanus that had just occurred in the hospital; and afterwards I introduced to your attention the case of a young woman, Caroline Stedman, aged 20, of a somewhat cachectic appearance, with a

TUMOUR ON THE THIGH

it first made its appearance seven years ago, had grown for three years, during which time it attained an enormous size, and had not increased in size since—that is, during the last four years. This tumour, I told you, left us in considerable doubt as to its true nature, but it was my impression, which has since been almost confirmed by further evidence, that it was not malignant; and, having consulted my colleagues on the subject, I said that I intended meeting you in the operating theatre the next day to accomplish its removal. It was here I left you, and I shall commence this lecture by continuing the progress of the case, and detail to you the steps of the operation as you saw them performed, give you a description and the microscopic appearance of the tumour, and bring the condition of the patient up to the present time.

The girl having been put under the influence of chloroform, which was administered (and administered successfully, as far as its anæsthetic effect was concerned) by Dr. Snow, I made a longitudinal incision over the centre of the tumour, extending from a little below Poupant's ligament to the middle third of the thigh, which exposed the cyst of the tumour throughout its whole length. I next dissected the flap of skin off the inner side of the tumour, in order to ascertain as far as I could its relation to the large vessels. I then removed the outer flap of integument, and the tumour was exposed, with the sartorius muscle crossing it. I raised the muscle and turned it on one side; still the tumour remained fixed and deeply seated; but, on making a transverse incision into the rectus, it immediately came forwards and was entirely exposed to view; then seperating it from its deep-seated attachments with the handle of the scalpel and a probe-pointed bistoury, in the direction of from below upwards, I entirely detached it, except a small root which proceeded from its upper part, and in which I could feel the pulsations of a large artery, probably furnishing the chief arterial supply to the tumour. Putting a ligature on this, and dividing the attachment of the tumour below the ligature, I removed the whole mass with comparatively little loss of blood, what bleeding there was being chiefly venous. The tumour was not at all connected with the femur, neither did it implicate the femoral artery or vein, but I could feel the pulsations of the former thumping away close to my little finger during the operation. The flaps of the wound were brought in apposition by means of one suture and a few strips of adhesive plaster, and the patient was removed to her bed. During the operation, which was a protracted one, and consequently required the administration of a large quantity of chloroform, she was quite unconscious and inexpressive of pain; but afterwards her collapsed state from the effects of this powerful agent was such as would have excited a considerable amount of apprehension in my mind had she not been in such experienced hands as those of Dr. Snow. After her removal from the operating theatre she still remained collapsed, and reaction could not be said to have taken place until between 10 and 11 p.m. At 5 p.m. I ordered her ɱxxv. of liq. opii. sed. in ʒj. of mist. camphoræ, and about 10 p.m. ɱxx. more of the liq. opii. sed. were given to her, and she afterwards passed a pretty good night. During the next two days her condition was very precarious. There was a quick, feeble, and at times fluttering pulse, dry and parched tongue, excessive thirst, hot and burning skin, frequent vomiting, and occasional rigors, attended with no salutary action whatever in the wound, which discharged a greenish exceedingly offensive watery fluid. A favourable change, however, then took place; her skin became moist and supple, her tongue less parched, her thirst diminished, and the wound commenced discharging a healthy cream-like pus. Since then she has been slowly but gradually improving, and I think I may now—the sixth day after the removal of the tumour—speak of her recovery with comparative confidence and certainty. I have some little hesitation in speaking confidently or decidedly as to the true cause of her symptoms since the operation, namely, whether they were simply and purely the effects of loss of blood on an irritable subject, or whether they were the consequences of hæmorrhage modified by the influence of chloroform. I am disposed to incline to the latter, however; for she certainly sustained but little loss of blood during the operation, and what she lost was chiefly venous; and I must say, her condition has appeared to me rather to be produced by the influence of some poison, some irritating or abnormal constituent in the blood, than by the influence simply of hæmorrhage. The continued vomiting that occurred in this case after the removal of the tumour, I have noticed also in several other instances after operating where chloroform has been administered; but although it is a frequent, yet it is not a constant occurrence under such conditions. The drawing which I have before me, and which I shall hand round to you, has been taken from the tumour, which I have also had placed on the table, but it has lost its colour and much of its former appearance from having been in spirit; and I do not know that the copy will not give you a better idea of it as it first appeared than the original itself does now. When first removed it was about the size of a bullock's heart, and, on being cut into displayed three distinct and separate structures, namely, a fibrous tissue—by far the largest constituent—with hard earthy concretions here and there deposited in it; a fatty tissue, and an encephaloid or brain-like tissue. This latter, the only one of the three about which a doubt of malignancy could be entertained, has been submitted to microscopic examination by Mr. Birkett, whom I look upon now as one of the first authorities on the subject of malignant tumours. His description of its appearance, which he has kindly given to me, I shall read to you in his own words.

"*Examination of a tumour removed by Mr. Cooper from the femoral region of a girl aged* 20.

"A large portion of the mass, a kind of nucleus, was formed of very firm fibrous tissue, in which a sort of earthy matter was deposited; around this, nodules of a very soft material were arranged, and these, at first sight, resembled medullary carcinoma; but, upon closer inspection, they were found to be composed of elements differing from those constituting such developments. These nodules were of a firmer consistence, and were smoother upon section than carcinoma medullare, especially after a little water had been allowed to flow gently over them. The mass was very vascular, but there were not those appearances of extravasation of blood so constantly seen in carcinoma medullare; nor was there the dull yellow appearance usually seen in tumours of this description which have attained such dimensions as the one under consideration; which appearance results from the death of the nucleated bodies. The nodules did not present the greyish translucent aspect of carcinoma medullare, but were more opaque, and the elements composing them were oval or elongated nucleated bodies, which were very coherent, and apparently connected together by some very delicate medium, having a finely granular appearance, in which, however, no fibre could be detected. Instead of falling to pieces, and rendering the water turbid, when placed between two pieces of glass the elements formed a distinct tissue, and, on the application of dilute acetic acid, the whole substance appeared to coagulate.

"There were very few spherical nucleated cells visible, and those I saw were sparingly dispersed over the field. Nor were there any cells in which the fatty degeneration had advanced; namely, those described as the granular and compound cells. From these characters I am disposed to class this tumour amongst the 'fibro-plastic' developments, and believe it not to be malignant; although I am not absolutely prepared to say that it is, or that it is not innocent; for I have never yet had an opportunity of following out a case of the kind to the end, and it is evident that, if innocent, the patient might and ought to live many years, unless carried off by any other cause.

So far, then, gentlemen, we have this pleasurable and

happy perspective: our patient progressing favourably, in her immediate recovery from the operation, and the strong hopes, founded on microscopic evidence, that her disease is not of a malignant, but of an innocent character. I have not time to dwell longer on the case, which has been throughout one of great interest, and one that has required the exercise of considerable judgment and discretion; but, before I leave it, I would explain what I mean by the term "malignant," a word which is frequently used in a vague and indefinite sense. By it I understand a diseased formation of low organisation, which has the power of self-propagation by independent cell-development, and which, when removed, recurs again, either in the cicatrix, or in some distant part of the body, to the ultimate destruction of the individual.

The next case that I shall proceed with is that of a young man, lying at No. 11, Luke Ward, whom I last week operated on for

EXOSTOSIS.

The history I have of him is as follows:—

Thomas Barclay, aged 19, a strong, active, and robust young man, of regular habits, and employed as a shipwright, states that he has always enjoyed good health up to the present time, and that, a fortnight previous to his admission, whilst in the pursuit of his ordinary employment, in the ship-yard, he slipped down on a piece of timber, and fell so as to receive a flat blow on the inner side of the left knee. It occasioned him a little pain at the time, but this soon disappeared, and he thought no more about it. Three days, however, after the fall, his knee became painful, and, his attention being attracted to it on this account, he discovered a small hard swelling on the inner side of the left extremity, just above the knee-joint, which perceptibly increased in size, and gradually became more painful every day till his admission. He presented himself with a small, hard, deep-seated, immoveable swelling—nearly the size of a walnut, and distinctly pedunculated—on the inner side of the lower extremity of the femur, and just above the knee-joint. He continued at his ordinary work till within a few days of his being admitted, but used to experience sharp, shooting, or pricking pains running up the thigh and down the leg to the inner side of the foot; and remarked, that, on awaking in the morning, he always found his leg drawn up, somewhat in tailor fashion, although both legs were quite straight when he had gone to sleep. At first he felt no inconvenience from the tumour, then it occasioned him pain when he stood on the affected leg; and now he has pain in bending the knee, and it interferes so much with the function of his leg, that he cannot walk easily without the use of a stick.

Exostosis, gentlemen, is a tumour, or an unnatural swelling from bone, and, although an unnatural swelling, yet it is a hypertrophy of a natural tissue. It may arise from a local cause or external injury, or from constitutional diathesis, some disposition or tendency in the individual to the excessive development of bone, which, if I may be allowed the expression, I will call an osseous diathesis. There are two varieties of this disease,—namely, the periosteal and medullary; the former being the most simple and least dangerous, and of by far the most frequent occurrence. They both have their origin in inflammation; in the one case, of the periosteum, in the other, of the medullary membrane; a plastic matter is secreted, and the development of osseous tissue takes place in it, according to the laws of nature regulating this process. Exostoses usually occur on those parts of bone in which tendons of muscles are inserted, and, although frequently inconvenient to the individual, and interfering with the ordinary motions of the body, yet they are not often dangerous to life, unless they project and press upon some important vital organ. Tumours, or unnatural growths from bone, of an innocent nature, such as those I have been describing, are, as I have before stated, called exostoses; but, when they are of a malignant character, they come under the category of osteo-sarcoma, a disease which is attended with far more important and serious consequences to the patient. In the case before us, a stout, healthy young man presented himself with a small bony tumour, about the size of the thumb, growing upwards, and proceeding from the inner condyle of the left femur, near the attachment of the round tendon of insertion of the adductor magnus, and which originated from an external injury. As it interfered materially with the ordinary motions of the leg, and occasioned him pain in walking, I determined on extirpating it; and, in the performance of the operation, I had no choice but to get at it, and no method but to cut down and effect its removal. Having, then, made a longitudinal incision, about two inches in length, over the osseous growth, and a short transverse one at the bottom of this, I dissected directly down to it, and, clearing away the soft parts from around it, found, as is usually met with in these cases, that it had a distinct neck; I then snipped it off with a pair of bone nippers, as near its attachment to the femur as I could, avoiding, at the same time, every possible chance of injuring the joint, which formed the chief danger in this operation. The edges of the wound were brought together, and retained in apposition by four metallic clamps or connecting wires; but considerable hæmorrhage ensued, and large clots protruded through the wound. By the use, however, of cold applications, in a few hours it ceased to bleed externally; but, from the painful and swollen state of the parts the next morning, it was evident that considerable effusion of blood had taken place into the surrounding tissues. The swelling and heat increased; the knee became more painful and sensitive to the touch, his pulse quick and irritable, his skin hot, and his sleep disturbed; these symptoms being attended with loss of appetite and frequent vomitings. From these indications I apprehended that the joint might have been opened, but, on the application of leeches and the internal use of salines, the symptoms gradually subsided, and the patient is doing well.

I shall next call your attention to a disease which is not unfrequent, and, when met with, usually occurs in persons with a low and depressed state of the vital powers; it is what is called

COLD ABSCESS,

and the subject of it in the present instance is Daniel Low, aged 81, who was a sailor and afterwards a soldier during the greater part of his life, and has generally enjoyed good health; states that twenty-two years ago he had a large abscess, situated on the thorax, to the right of the inferior part of the sternum, which remained open for eighteen months, and was connected with a spear wound that he had previously received. About a month since, he discovered a small swelling on the left side of the thorax, two inches below the nipple; this swelling, which was neither tender nor painful, gradually increased for about a week and then ceased to enlarge; but another began to spring up just below it, and has continued to increase ever since, being now a little larger than a hen's egg. During the last few days the swelling that first appeared has commenced enlarging again, and has attained nearly the same dimensions as the other. Has had no shivering, nor experienced any constitutional disturbance. Both swellings are freely moveable on the thoracic parietes, and have no inflammatory appearance except just below the centre, where the skin is a little red, as though they were beginning to point. Fluctuation is manifest in both, but more so in the lower one. Appetite good, but sleeps badly, on account of pains in his legs, which are also weak, causing him to walk indifferently.

Such is the history and such the symptoms of this case, which coincide exactly with those of cold or lymph abscess; a disease which seems to depend more on an altered condition of the tissue itself, in individuals of low vital activity, than on any actual constitutional cause. These abscesses are preceded by little or no perceptible general or local disturbance, and with no evidence, except their formation, of any inflammatory action; but as they progress they increase in size, become painful, excite a sensation of tension or pressure, produce a more or less general disturbance of the system, diminishing the appetite, and preventing sleep; and, finally, if left to nature, burst by ulcerating through the skin and discharging usually a thin, serous, and often putrid pus. But in the case of the old man before us, whose white hair and venerable look bear testimony of his old age, we anticipated nature in her object, and opened both abscesses; first one, and then the other a few days afterwards, as they began to excite pain, to interfere with the appetite and sleep, and altogether to occasion a considerable amount of general constitutional irritation and excitement. A quantity of a thin pus, somewhat streaked with blood, issued, and his symptoms were immediately much relieved; but the abscesses still remain open, and still continue to discharge. In the microscopic examination of the contents of the abscess, were found true pus globules floating in a fluid—the liquor puris. This, however, gentlemen, is not always the case in these cold abscesses; for we sometimes meet

with exudation globules, sometimes ill-formed pus globules, and sometimes a clear serous fluid. So that we can trace a gradual transition from the exudation cell to the true pus corpuscle ; and there certainly does seem to be some intimate relation, some unknown connexion between the two, and some ground for the supposition that the pus corpuscle is a modification or further development of the exudation cell ; the nature of the inflammation determining the production of the one or the other. Whether this be or be not correct, however, is uncertain ; and the origin of the pus globule yet remains a question, *sub judice*, and offers a good field for instructive investigation.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.

By HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XVI.

TUMOURS OF THE EYE AND ITS APPENDAGES.—Warts and Fungous Vegetations.—Excision preferable to their Removal by Escharotics.—Danger of Escharotics.—Circumstances under which their Employment is necessary.—Manner of using them.—Little Steatomatous Tumour of Lid.—Stye.—Tarsal Tumour.—Supposed existence of Black Tumours of the Eye, which resemble Melanosis, but are devoid of Malignancy.

GENTLEMEN,—Warts and fungous vegetations of all kinds about the eye should be cut off without delay. By some surgeons, escharotics are used in preference to the knife. When such growths have their site on the conjunctiva, I object to the practice of applying escharotics ; it is tedious, and often injurious ; it is at variance with what should be ever held as a broad rule in ophthalmic surgery,—never to apply any *irritating* substances to the eye when it is possible to avoid it. Caustic potass, and the mineral acids, both of which I have seen used several times, are unsafe agents to be employed about the globe of the eye. Unless great care is exercised, they are apt to run beyond the spot to which they should be restricted.

I lately saw a surgeon apply the potass to a little tumour of the sclerotica near to the margin of the cornea, and although, as a precaution, he oiled the cornea, yet he frustrated his endeavours,—too much potass was used, it spread to the cornea, and made it opaque. Again, without great care, these strong escharotics may produce a greater slough than is required ; and, however unimportant going a little beyond bounds might be in other parts of the body, precision must be secured for the eye. When a returning growth or other circumstances demand the employment of escharotics, the milder kinds should first be tried, and a fair trial given to them ; and make it a rule, whichever are to be used, whether strong or weak, to apply them accurately and neatly, and a little at a time, in order that they may not spread to the sound portions of the eye ; and separate for a few minutes the parts so treated from the other portion of the eye with which it naturally comes in contact ; and, before removing the restraint, dry it, by wiping or mopping it up ; and it may even be requisite to shield it by grease or other means.

The little steotomatous tumours that usually exist in other parts of the face besides the eyelids, and that vary in size from that of a pin's head to twice that size, are best got rid of by cutting them across, and squeezing them out. When the cyst does not separate, it must be pulled out with a pair of forceps.

The characters of a stye are too well known to need description. I shall therefore speak only of its treatment. I believe, that whenever it suppurates, however inactively, its process of decline may be considerably shortened by opening it, and applying an astringent ointment. Styes are generally indicative of unhealthiness of body, and, as a consequence, are common in strumous, and enfeebled, and broken-down persons,—a lengthy employment of the eyes by artificial light, in such individuals, will develope them. They are ushered in by soreness of the lid,—sometimes very great inflammation of the conjunctiva. Time, however, is generally afforded for preventive treatment. Rest of the eye—frequent application of cold lotions to the exterior of the lid, and opiate lotions to the conjunctiva, with the adoption of means, according to the indication of the symptoms, that will recruit the enfeebled or deranged frame, are what I advise.

Perhaps the most frequent indication of disordered health will be found in derangement of the digestive organs.

Tarsal tumours are small collections of glairy, curdled, or gelatinous matter, deposited in the substance of the tarsal cartilage, near their free margins, and appear externally as little rounded prominences under the skin. Sometimes there is no internal indication of their presence ; and at most, it is as a redness of the lid, with a minute dark brown or black spot in the centre. These tumours are unquestionably of constitutional origin ; but their connexion with a vitiated state of health is not so marked as in the cases of styes.

If they are taken in time,—that is, when the cartilage is merely swollen, without fluid being deposited, and the same treatment that I have recommended for the early stage of styes, be adopted,—they will most likely disappear. After they contain fluid, a fact which is indicated by the dark spot in the inside of the cartilage, no treatment save the evacuation of the fluid will reduce them. Spontaneous cure, by suppuration and bursting, is a process of such slowness that it is seldom allowed to come to pass. Although neglected, they do not acquire any magnitude,—the largest I have ever seen was about the size of a cherry. To evacuate them, the lids should be turned inside out, and a puncture made into them, and the point of the knife moved about to irritate their walls and excite inflammation, with the object of destroying the secreting surface. But I am by no means certain of the necessity of such a process ; perhaps the mere evacuation of them is sufficient. The fluid they contain is not always proportionate in quantity to their size. Directly after being operated on, the external swelling is larger than ever, but it gradually subsides, and in a few weeks or months disappears.

Dr. Jacob, of Dublin, has lately endeavoured to stimulate surgeons to investigate more fully the nature of tumours of the eye and orbit, it being his opinion, that many which are supposed to be malignant are not so in reality, although they may not be amenable to medical treatment, but would spread or grow to any size unless removed by the knife or escharotics. His remarks have particular reference to what we are accustomed to call "melanotic tumours," of which I should have been silent, had it not been for the publication of the Doctor's views in the *Dublin Medical Press*, and of which a notice appears in "Dr. Ranking's Retrospect" for the first half year of 1850, and from which source I draw my information, as I cannot apply to the original. He argues, that the blackness of a disordered mass affords no clue as to its true character. He had seen, in old persons, deposits of black matter under the conjunctiva without any disease, and the fact of a growth not healing in no way proved the existence of a malignant disease, as he instances in sores and warts that will not cease to increase under any kind of medical treatment. One of the two cases given is that of a black spongy tumour, two inches in diameter, overlapping the lids in all directions, so as nearly to close the whole opening of the orbit. The surface was lobulated, and appeared to have been compressed by the bandage with which it had been covered, and bled slightly when the adherent dressing was removed. It appeared to be attached to the eyeball by a cylindrical stalk, which was slightly enclosed by the lids, and drawing the knife across it, as a preliminary step of the operation, and being prepared to remove the contents of the orbit, if necessary, he found that he had cut across a healthy eyeball, the disease, being confined to the conjunctiva, of the cornea, and of the sclerotica. He conceived it to be a tegumentary growth from the front of the eye. The divided globe healed kindly. Sufficient time had not elapsed to enable him to pronounce as to the true nature of the disease, whether it was to be considered malignant or not. Its black colour, spongy texture, and slightly lobulated appearance, did not convince him that it was a fungoid growth of a fatal nature, which would have destroyed life by malignant implication of the surrounding parts ; although it might have produced death by growing to a mass which could not be arrested or reduced by medical remedies.

Pathology will certainly have advanced a step, when a means of accurate diagnosis between melanosis of a malignant character, and black tumours that are not malignant, shall be discovered. The tendency of melanosis to return at a spot where it has been imperfectly removed, is so

much feared by most surgeons, that they are justly anxious to make the extirpation effectual, and therefore correctly extend their excisions into the healthy tissues; and the necessity of this is more evident, since melanotic matter has been found in the blood vessels of an apparently healthy tissue in the immediate neighbourhood of a melanotic mass. Now, how important it would be to be enabled to remove a black tumour from the eye, from the conjunctiva of the globe, without sacrificing the globe, and to afford the comfortable consolation to a patient, that his outward manifestation of disease is not an index of more terrible results within! This is no extravagant phantom. Since the diagnosis of incipient fungus hæmatodes of the eyeball has been better understood, numbers of eyes that would have been scooped out in a hurry have been saved. Dr. Jacob has broached the subject, to elicit inquiry to decide as to what description of tumour the term "cancer and malignant disease" be restricted. His object is praiseworthy, and he merits the thanks of the public as well as the co-operation of the Profession. I shall conclude this subject with the particulars of a case which may be very appropriately introduced.

A man, aged 64, applied to the Central London Ophthalmic Hospital, in August, 1847, with a circumscribed black mass, about the size of an almond, growing lengthwise on the interior of the left lower lid, which was partially everted. Its attachment seemed slight, and the appearance it presented was such as to induce the idea that it could be pulled away from the lid, to which it seemed to adhere rather than grow from. The conjunctiva of the lid and of the lower part of the globe was of a dirty-brown appearance. In other respects the globe seemed healthy. About two years before he had discovered it as "a little black pimple." From its commencement to the present time he had not felt pain in it, but now it was an inconvenience, as it interfered with the action of the lids. His face had an unhealthy look. He had applied to several surgeons, amongst whom was Mr. Lloyd, of Bedford-row. I considered it to be a case of melanosis. I did not see him after that till the 27th of May, 1850, when he again applied to the hospital, but gave a different name, for what reason I could not discover. In the meantime he had seen many medical men, and had applied also to several hospitals. He had been repeatedly advised to have the eyelid and eyeball removed. I was now acquainted with Dr. Jacob's views, and looked into the case narrowly. The mass had grown so large that it extended over the globe and passed under the upper lid, causing it to project very much, while a piece as big as a nutmeg protruded from between the lids. With some difficulty I got a glimpse of the cornea, which was hazy, but not opaque. The endeavour produced pain and a little bleeding. The same unhealthy state of countenance remained, and he had lost flesh. I determined to admit him and examine the eye and the surrounding parts more fully, under the effects of chloroform. He went home with the avowed intention of coming in on the next day, but never returned. My colleague, Dr. Taylor, examined with the microscope a little piece of the tumour, and pronounced it to be made up of epithelium scales. This case would perhaps be considered by Dr. Jacob as non-malignant, considering the duration of it; and the fact of the surrounding tissues not becoming implicated would seem to strengthen that opinion.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY OF THE UTERUS; ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D., Londin.,

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(Continued from page 539.)

From the description of the nerves of the uterus, I turn to examine the grounds for the difference of opinion which has of late existed upon this part of the anatomy. Perhaps I ought to have done this some years ago; but, feeling confident in the correctness of the facts I then published, I preferred to leave their ultimate reception to time, rather than engage in an angry discussion, which was very contrary to my feelings; and I further adopted this course, as, from circumstances over which I had no control, I could not then devote sufficient time to the subject. However, the researches of Dr. Robert Lee upon these points have been from time to time so prominently put forward, and the results at which he has arrived are so totally opposed to those which, after repeated dissection and careful investigation, I have come to, that I feel compelled to make a close inquiry into their accuracy and value; especially as the statements he has put forth are totally irreconcilable with what I believe to be the correct anatomy of this organ. The chief subjects which will require examination are the amount of nerves supplied to the uterus, and the condition of those nerves during pregnancy.

A part of the subject has been so admirably discussed in the *British and Foreign Medico-Chirurgical Review* for July, 1849, that, in going over it, I shall make use of the account there given to a large extent, as forcibly expressing the same views I entertain upon many of the points; yet occasionally it will be necessary to point out wherein I differ from it.

THE NERVOUS SUPPLY TO THE UTERUS.

The statements of Dr. Lee on this subject are briefly as follow:—The uterus is supplied by "a special nervous system" which consists of "nervous ganglionic plexuses" and "great nervous ganglia," which cover the "whole of the anterior" and "the posterior surface of the uterus" "as high as the fundus," and consequently measures upwards of 200 square inches in extent. This "great system of nerves enlarges with the coats, blood-vessels, and absorbents, during pregnancy, and returns after parturition to its original condition before conception takes place." "If these nerves," he adds, "could not be demonstrated, its physiology and pathology would be completely inexplicable."(a)

These statements are founded upon a series of dissections, which form the subject of various papers communicated to the Royal Society.

The first paper was presented by Dr. Lee, in December, 1839, and is said to contain "the Discovery of the Ganglionic System of the Gravid Uterus" made in 1838. This paper was subsequently withdrawn. The structures described as newly discovered ganglia and nerves being found, on examination of the preparation, to consist solely of bands of uterine tissue.

In January, 1841, a thin folio was published, entitled, "On the Nerves of the Uterus," accompanied by three engravings. The first part of this appears to contain the paper which was presented to the Royal Society in 1839. But the preparations represented in the drawings are not the same as those which were described in that paper, the result of the examination of which has been already stated. Here, for the first time, the fibro-cellular tissue of the gravid uterus, and the outer layer of muscular fibres, are described and figured as nervous structures. The description, however, of these tissues, in the publication, in the author's own words, is so totally inapplicable to the characters of nervous structures, that it is a matter of surprise how these tissues could be mistaken for nerves. In one part of the work, the nerves are said to "present the appearance of a white, pearly, fasciculated membrane, about a quarter of an inch in breadth," which is called "the great transverse plexuses." This is a band of fibro-cellular tissue. In another part the nerves and ganglia are described as "a great mass of reddish-coloured fibres firmly interlaced together, and are called "ganglionic plexuses of nerves." This is unquestionably a portion of the organic muscular tissue of the organ.

In describing the nerves and ganglia as having such opposite characters as are attributed to them in these two descriptions, it appears to have escaped the notice of the author, that no one tissue can have characters so opposed to each other. No tissue can, in one part of the preparation, present "the appearance of a white, pearly, fasciculated membrane," and in another part of the same preparation be "a great mass of reddish-coloured fibres firmly interlaced together." If the former of these descriptions represent nervous tissue, the latter certainly cannot.

In June, 1841, another paper was presented to the Royal Society by Dr. Lee, and published in the "Philosophical Transactions." In this the former statements are re-asserted, and further structures described as nerves and ganglia. The

(a) All these quotations are taken from Dr. Lee's recent work, "Memoirs of the Ganglia and Nerves of the Uterus," 1849.

plexus formed by the union of the hypogastric plexus with branches of the sacral nerves is enveloped in cellular tissue, and incorrectly described as the "hypogastric ganglion," "about an inch and a half long." A combination of tissues, viz., arteries, veins, cellular tissue, with some nerves and small ganglia, is stated to be a "great web of ganglia and nerves on the side of the vagina, by which it is completely covered." To prove that there are nervous structures, a letter is given from Mr. John Dalrymple, who states that, after having examined Dr. Lee's dissections of the gravid uterus, he some time after procured a recent unimpregnated uterus, upon which he traced some nerves, believing them to be the same as those dissected by Dr. Lee in the gravid organ. Mr. Dalrymple came to this conclusion because they were found in a similar situation, *i. e.*, near the ureter; and as these, on examination with the microscope, were found to be nerves, it was thence concluded that the structures dissected out by Dr. Lee in other preparations must be nerves likewise. Nothing can be more unsatisfactory than such an argument as this brought forward to demonstrate the correctness of anatomical preparations. Dr. Lee makes a dissection of the gravid uterus, Mr. Dalrymple finds a piece of nerve in an unimpregnated uterus, and, because this piece of nerve, when examined with the microscope, is found to be really a piece of nerve, it is hence concluded that all the structures dissected by Dr. Lee in other preparations, and which measure upwards of 200 square inches in extent, are nerves likewise.

In June, 1842, an appendix to the preceding paper was presented to the Royal Society, and published in the "Philosophical Transactions." Here a dissection of the gravid uterus at the ninth month is figured and described; the drawings which accompanied the previous paper having been taken from the gravid uterus at the fourth month. The so-called "hypogastric ganglion" is more enlarged; and, as the muscular tissue at the ninth month is further developed than at the fourth month, so it is described as "other nervous structures of far greater size." Various new names are also given to it, as "the left spermatic ganglion," "the anterior subperitoneal ganglia and plexuses," "the posterior subperitoneal ganglia and plexuses," "the left subperitoneal plexuses," &c. The description which the author here gives of these structures is again so completely opposed to the characters of nervous tissue, that it is a matter for further wonder how they could be mistaken for such. He describes them as "a dense reddish-brown coloured mass, consisting of fibres firmly interlaced together," which is a good description of the outer layer of muscular tissue, but contains no characteristic of nervous tissue. On considering this paper, it is curious also to notice how the author overlooks the caution of Professor Lobstein, although quoted by himself, in the introduction to the thin folio. Professor Lobstein says, (p. 168, "De Nervi Sympathetici Humani Fabricâ Usu et Morbis, Commentatio, 1823,") "when the external tunic of the uterus is taken away, many fibres are found which decussate with themselves in various ways, and are united by loose cellular tissue, both with each other and with the denser and deeper structures of the uterus. These fibres, of whose growth I am ignorant, may readily be taken for the continuation of nervous branches, yet they differ from them not only in their direction and greater thickness, but also in the greater flatness of their figure. To whatever part of the uterus the nerves may be finally distributed, it appears certain to me that they do not interlace with each other in the substance of the uterus." Yet, after quoting Professor Lobstein, Dr. Lee removes the "external tunic of the uterus," and describes the "fibres" found beneath it as nervous "ganglia and plexuses."

In June, 1845, a further supplement was presented to the Royal Society by Dr. Lee, wherein the descriptions of the former papers are said to be confirmed by new dissections. No description, however, of these new dissections is given. This supplement was not printed.

Thus, in a series of papers extending over a period of four years and a half, and giving the description of several dissections, all the tissues of which the gravid uterus is composed have, at one time or other, been described as ganglia and nervous plexuses, fibro-cellular tissue, organic muscular tissue, arteries, veins, absorbents, and lastly, nerves surrounded by their sheath, have all been called in to aid in the formation of the "special nervous system" of the uterus. The writer of the article in the *British and Foreign Medico-Chirurgical Review*, July, 1849, when speaking of "the validity of Dr. R. Lee's claims to the discovery of additional nerves and ganglia," (p. 75) makes the following observations. And I am glad to take this disinterested account as accurately expressing, so far as it goes, my own opinions upon the subject,—a more searching examination having enabled me to state, as I have already done, the nature of the various tissues which have been described as ganglia and nervous plexuses.

"It is maintained, however, by many excellent anatomists, that Dr. Lee's subperitoneal nerves and ganglia are *not* nerves and ganglia at all, but are carved out of the fibrous texture of the uterus." "We cannot see that any real obstacle can exist to the determination of this question, if Dr. Lee will only deign to afford the materials for its settlement; for every histologist well knows that the microscope now presents an unfailing test as to the presence or absence of nerve-fibres and ganglionic corpuscles in supposed nerves and ganglia, provided these be examined in the recent state. *From this test we must say, on our own knowledge, that Dr. Lee has held back;* alleging precisely the same grounds for his unwillingness as are set forth in the following extract from Dr. Tyler Smith's discussion of the subject:—

"'The opponents of Dr. Lee confidently appeal to the microscope to prove the justness of their rejection of his labours; but the fact of such an appeal would seem a prejudice against him, and a willingness to deny the fidelity of his dissections. The microscope is used to ascertain the intimate physical appearances of nervous and other tissues, but hardly, on ordinary occasions, to distinguish grossly as between nerve, muscle, and cellular tissue. It must be borne in mind that the nerves of the body generally were dissected, and held to be nerves on other evidence than such as that furnished by the microscope, long before this valuable instrument was invented. If, in the case of the uterine nerves, we deny that the tracing of the scalpel or dissecting needle, continuity with other nervous structures, and careful ocular examination—for the debatable structures are quite large enough to be inspected by sight and touch—if, I say, these are not sufficient to help us to a decision in the case of the uterine nerves, neurological anatomy should begin again, and we ought to question the reality of every nerve in the body; for they hold their title to be considered nerves only on evidence which, if applied to the uterine nerves, answers directly in the affirmative.—P. 47.

"Nothing (continues the reviewer) can be more unsatisfactory than such arguments. There is not a single point of view from which their irrelevancy is not obviously discernible. Dr. Lee finds nerves and ganglia where accomplished anatomists, accustomed to dissection, and carefully prosecuting similar researches, had failed to discover them. His dissections are scrutinized by many other anatomists, several of whom deny *in toto* their claim to the character of nerves. Yet every one of these would say, if Dr. Lee will *prove* these to be nerves by that which every histologist now recognises as the only legitimate test, we will readily accord to him all the credit he demands. Will Dr. Lee or his partisans continue to affirm the existence of these nerves and ganglia if microscopic research proves that neither nerve-tubes nor ganglionic cells exist in them?

"Even supposing, then, that the uterine nerves were as clearly displayed by Dr. Lee as the nerves of the face, or of any other part about whose nervous supply there is no question, the very fact that others have failed and do fail to bring out the same results, is of itself a sufficient reason for requiring further evidence. But there is ample ground for the assertion, that this evidence is more required in the case before us than in any other. For, on the one hand, the nerves of the sympathetic system in general contain a much larger amount of ordinary fibrous tissue mixed up in their trunks than do those of the cerebro-spinal system; whilst, on the other, the tissue of the uterus itself is so indistinctly muscular, so little different—either to the naked eye, or under a low magnifying power—from ordinary fibrous textures, that there is not the same facility of isolating the supposed nerve trunks from it as there is in the case of ordinary nerves and muscles. When, moreover, we look at the supposed *centres* of the sympathetic system, and see how small a part of the ganglionic enlargement is frequently due to the presence of vesicular matter, the greater portion arising from the junction of nerve-trunks and from the introduction of a considerable amount of fibrous tissue, *we feel that we have a right to demand that any new ganglia should be submitted to the test which has been applied to most of the old ones, and that the*

presence of the characteristic ganglionic corpuscles should be demonstrated in them, especially when a doubt exists as to their connexion with the nervous system at all. Dr. Lee, we have understood, affirms that he takes his stand upon the definitions of nerves and ganglia which have been in vogue amongst anatomists for the last two thousand years, and refuses to admit that the microscopic test *can* demonstrate a fallacy in his researches. If this method be adopted by other anatomists, we may bid adieu to all progress in our science. The wisdom of our ancestors is to be our only guide. Of that which *their* eyes saw and their hands touched we are forbidden to learn anything more. Everything must remain exactly as they left it, except when the extension of our knowledge is obtained by their own methods.

"It must be specially remembered in the present case, that the term 'ganglion' has acquired of late years a definite *physiological* signification very different from its original sense, which was purely *anatomical*. It formerly implied, as its name imports, merely a knob-like enlargement upon a nervous cord; and of the uses of such enlargements no definite idea could be entertained, when it was believed that the brain was the sole source of nervous power in the body. *Now*, on the other hand, we mean by a ganglion a collection of vesicular matter, which serves as a centre of nervous power to certain fibres connected with it; such a ganglionic centre may exist without any obvious external enlargement; and enlargements may exist on nervous cords without the presence of ganglionic corpuscles in their interior. Hence, when Dr. Lee justifies his statement by appeal to the usage of the older anatomists, he entirely leaves out of view the complete change which, by the tacit consent of the whole scientific world, has taken place in the acceptation of the term ganglion. His assertions only go to the extent of proving the existence of knob-like enlargements upon the nervous cords,—supposing these last *to be* really nerves; *the physiologist cannot accept this statement, as proving the development of new centres of nervous power during the enlargement of the uterus, until it shall have been shown that these enlargements contain vesicular neurine.* If Dr. Lee had accepted the offer of experienced histologists, to test his assertions by the microscopic examination of portions of his supposed nerves and ganglia, dissected from the recent uterus, the question would not have remained in the uncertainty which still clings around it. No such examination of preparations preserved in spirit can be at all satifactory; since the 'gelatinous' nerve-fibres, when hardened by alcohol, lose their distinctive characters to such a degree as to be nearly, if not quite, unrecognisable."

After this lengthened quotation, I regret being obliged to differ from the reviewer in regard to the concluding portion of it. There can be no doubt that the gelatinous nerve-fibres, when preserved in any preserving fluid, whether alcohol, dilute spirit, or other fluid, loose the characters which distinguish them in the recent state, and cannot be recognised by these characters, yet an anatomist, accustomed to the changes which any fluid produces upon the nerve-fibres, can as readily recognise them by these altered characters as he can by the characters which they had in the recent condition. I am aware that this mode of examination is open to the objection, that it requires, so to speak, a double knowledge to conduct it,—a knowledge of the characters of the gelatinous fibre in the recent condition, and a knowledge of the alterations which these characters undergo after immersion for a certain time in a preserving fluid. Still, a histologist, unacquainted with these alterations, can arrive at an equally satisfactory result by employing a comparative mode of examination. And I have employed this method with various observers, who have invariably expressed themselves fully satisfied with the result. For example, suppose a preparation in which there are disputed tissues requiring a microscopic examination. There are always some portions of the preparation about which there can be no dispute, as in this case, a portion of the larger nerves. A small portion, then, of this known structure is placed under the microscope, and compared with a portion of the disputed structures. This comparative examination readily demonstrates that they are not the same structures, and the direct conclusion then is, that if the one be nerve, the other, or disputed tissue, certainly is not nerve. By thus proceeding from the known to the unknown we arrive at the clear demonstration, that the unknown are not nervous structures, although we may be unable to determine, at the time of the comparative examination, the exact nature of the structure examined. Further inquiries, however, will readily elucidate this doubt.

In my next paper I will examine the question of the enlargement of the nerves during pregnancy.

9a, Langham-place.

[To be continued.]

A NEW SCISSARS

FOR THE

REMOVAL OF OPAQUE CAPSULES AND FALSE MEMBRANES FROM THE CHAMBERS OF THE EYE.

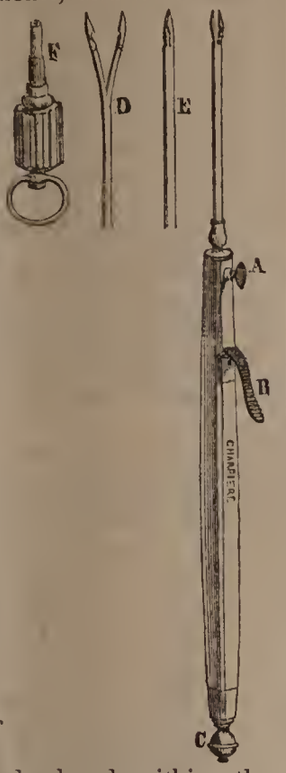
By W. R. WILDE, F.R.C.S.

Surgeon to St. Mark's Ophthalmic Hospital, Dublin.

Every person who has performed many operations for cataract must be aware of the difficulty there is in removing from the eye, or pressing out of the field of vision, a piece of opaque capsule or a scrap of false membrane. The causes which produce these obstructions to vision, and the appearances which they present, are so well known to ophthalmic surgeons as not to require description here. Frequently the piece of opaque capsule is held behind or within the pupil by a delicately-fine cobweb-like membrane, of a light grey colour, but sometimes transparent, which is generally attached to the ciliary processes, or to the back of the iris. Notwithstanding its tenuity, this membrane is very tough; and, although one can make large rents in it with a cataract needle, particularly that with a fine cutting edge, such as I am in the habit of using, it is very difficult to cut a piece of it across, and the narrower the strip the greater the difficulty. One can pass the needle behind, and bring the offending body forward even to the back of the cornea, or press it backwards into the vitreous humour, to any reasonable depth; but still, it will not give way, and a manifest drag appearing in the ciliary attachment of the iris if we continue the process, warns us to desist. Sometimes the piece of capsule itself occupies the position of the membrane which I have now described. If by any means one end of the opaque body can be detached, the subsequent difficulties are much lessened. An opening may then be made in the cornea opposite the point where the opaque body is still adherent to the back of the iris, the aqueous fluid partially evacuated, and then, as the offending substance falls forward towards the wound in the cornea, it may be hooked out, or drawn through with Dalrymple's forceps or the little instrument which I described for the purpose some years ago, (see Ophthalmic Report in the *Dublin Quarterly Journal*, for 1848. Vol. V., p. 501,) and then removed with a fine scissars. Care should be taken that no portion of the capsule, or the membrane to which it is attached to the iris, remain in the wound. The lids may be closed, and the case treated like one of an ordinary extraction, except that we must keep the pupil dilated while the aqueous fluid is re-secreted. This operation is the one I have been in the habit of performing in cases such as the above; but, as I have already remarked, it is chiefly applicable to instances where the capsule remains like a leaf attached to its stalk. To think of depressing it from out of the field of vision is almost futile, its peduncle is highly elastic, and it springs back into its former position the moment we relieve it from the pressure of the needle.

The first grand point I conceive, in such cases, is to detach the capsule or its surrounding membrane at one extremity so as to leave it attached by only one end: but this is a very difficult matter. The ordinary iris-scissars requires too large an opening in the cornea to work with freedom. I have, therefore, taken advantage of the principle of the very beautiful instrument lately invented by M. Charrière, the celebrated cutler of Paris,—and described in the *Annuaire de Médécin et de Chirurgie* for the present year, and styled, by Dr. Desmarres, a Serretelé—to construct a pair of scissars that will occupy less space than any other yet invented, cut with greater certainty, and that can with greater facility be introduced either through the cornea or sclerotica. The capsule-forceps described in the *Annuaire*, being likewise made in London, by Mr. Weiss, and now in the hands of every ophthalmic surgeon, is already so well known as not

to require a minute description of its beautiful mechanism here, and the accompanying illustration will explain my meaning more perfectly than words. To the end of a fine double canula is attached a small but strong brass spiral spring which runs down through a hollow ivory handle of the usual length of most eye instruments, and fixed at the end by a ball nut, C. By means of the finger-spring B the long canula is pressed forward through the short one or collar, which is attached by means of the small thumb-screw A to a metal plate at the end of the handle. The scissars part, D, consists of a fine steel stem an inch and three quarters long, and not so thick as an ordinary darning needle, the end of which is cleft and each extremity beautifully formed into the blade of a fine pair of *shears*, scarcely a line and a half long. My idea was, that the instrument should cut like the ordinary shears used in sheep-shearing or wool manufactory, in which a spring keeps the blades apart, and they are brought together by the action of the hand. The instrument maker has beautifully carried out my conception, and, by giving a slight inward curve or *wind*, as it is technically termed, to each blade, like the scissars invented by Dr. Wollaston, and also so setting the fork of this part of the instrument, that the blades would cross each other on the wrong side if closed, and when not regulated; they, when properly adjusted, and placed within the canula, cut with the greatest certainty and precision. The various parts of the instrument having been put together up to this point, the blade-stem, D, is passed down through the oval canula, with the flat of the blades on the plane of the spring and screw, until they begin to be closed by the pressure of the canula. The scissars or shear blades must then be set with the fingers, (and this will require some delicate and dexterous management) so as to close and cross each other in the proper direction, and the stem is then run down the canula to the requisite depth, when the thumb-screw, A, which also fixes the collar in which the canula moves, is to be screwed home, and the blade-stem fixed thereby. The requisite degree of elasticity to draw back the canula can be given by adjusting the nut at C.



When the instrument is about to be used, the spring B being pressed down to the handle by the middle finger, the long canula is projected through the collar, and the blades of the scissars closed with that very clipping motion, which is most requisite: and the spring B being relaxed, the coil within the handle brings back the canula, and allows the blades of the scissars to divaricate. When the canula is pressed forward, and the blades of the scissars closed, they form a fine needle-like point, as shown at E. Figure F is a key to fix and screw up the spring B. No scissars that I have ever met cuts with the same degree of sharpness and accuracy; and I have no doubt that this will shortly be rendered much finer, so as to occupy scarcely more space than a cataract needle. It is intended to be introduced either through the sclerotic or cornea, according to the most advantageous position for dividing the portion of capsule or false membrane. When introduced through the cornea, an opening should first be made for it with a flat needle or the point of an extraction knife. Possibly this instrument or some modification of it may be useful in performing the operation for artificial pupil, or in detaching portions of the iris from the back of the cornea, &c. I have been induced, by M. Charrière, to give this early notice of the instrument, otherwise I should have waited until I had had practical experience of its value and working.

The great Royal Hospital near Upsal, in Sweden, has been consumed by fire, 25 lunatics perishing in the flames. It is supposed to have been the work of an incendiary.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,
Assistant-Surgeon to the Hospital and Demonstrator of Anatomy in the School.

COMPOUND COMMINUTED FRACTURE OF THE FEMUR.—

SEPARATION OF THE PATELLA, AND A LARGE PORTION OF THE LOWER END OF THE FORMER.

RECOVERY WITH A USEFUL LIMB.

A hawker, aged 36, was admitted sometime back, under the care of Mr. Luke, having sustained a fracture of the ileum, which united in about six or seven weeks. On examining the right lower extremity, the effects of an old accident were evident,—the limb was shorter than the left by two and a-half inches, its axis directed downwards and somewhat forwards and outwards, the leg being, in relation with the thigh, at an angle of 130°. There was imperfect anchylosis, and the knee-joint admitted of slight flexion and extension. A large depressed cicatrix existed at the lower and inner part of the thigh, oblique in direction, and six inches in length. The most depressed part of the scar was bounded below by the prominent inner part of the circumference of the head of the tibia, which had been drawn considerably upwards, to the extent, in fact, of about two inches beyond the level of the other, and occupying the place of the inner condyle of the femur. No trace of the patella could be detected, but the anterior and outer part of the head of the tibia was bounded by a prominence of bone broader below than above, continuous with the shaft of the femur, and evidently its modified external condyle. The measurement round the circumference of the right leg, (which presented at its upper and outer part the continuation of the cicatrix observed at the lower part of the thigh,) at its upper third, was ten inches, the measurement round the unaffected limb, in the same situation, being thirteen. The measurement round the upper third of the affected thigh was sixteen and a-half inches; of the left, eighteen inches.

The patient stated, that, when he was 13 years old, he was pitched out of a loaded cart, and the wheel ran over the knee and leg. The injury was of that severe character, that the medical man who was called in urged the propriety of the removal of the limb. The patient, however, would not consent, and his mother treated the limb herself; poultices of various kinds being had recourse to. After he had lain a long time in bed, he pulled away several loose pieces of bone from the lower and inner part of the thigh, and ultimately the knee cap. In two years after the accident he was able to walk to school on a short crutch, and ultimately got so far well, "that he could walk, was able to wheel a barrow, and do many pieces of laborious work; and, having to cut grass about hedges or among trees, got expert, and every harvest had to work." (a)

This remarkable case, illustrating the reparative powers of Nature, calls to my mind the following interesting case of compensating hypertrophy:—

UNUNITED FRACTURE OF THE TIBIA;

THE FIBULA HAVING BECOME SO MODIFIED AS TO BE CAPABLE OF COMPENSATING TO A GREAT EXTENT FOR THE DEFICIENCY.

A lad, aged 10, was admitted some time back with a dislocation of the acromial end of the clavicle. The right leg had sustained so severe a compound fracture two or three years previously, that the necessity of amputating it was strongly urged on the parents of the child, who, however, would not accede to it. The leg presented at the middle a vertical cicatrix two inches in length; and half an inch internal to the lower extremity of the scar the skin was retracted, and over its centre was a depression, immediately behind which was a dense ligament, half-an-inch in breadth and three quarters of an inch long, running obliquely from above downwards and outwards, and connecting together the upper and lower portions of the tibia, which admitted of independent

(a) A model of the limb, in wax, has been placed in the museum of the College of Surgeons by Mr. Luke.

movement. The fibula was much curved in the entero-posterior direction. Its antero-posterior diameter above measured an inch and a quarter, and gradually decreased to the centre of the bone, where it measured an inch; below nearly the same as above. The articulation between its upper extremity and the tibia admitted of flexion and extension, rotation inwards and outwards. The lower extremity was about half a size greater than the left outer malleolus. The boy could walk three miles without pain or inconvenience, and during progression the upper part of the tibia moved but slightly, flexion and extension of the foot being performed mainly through the medium of the fibula. The muscles of the anterior and outer part of the leg were much wasted: those on the outer and back part considerably hypertrophied.

DISLOCATION OF THE HUMERUS FORWARD, BENEATH THE PECTORAL.—

RUPTURE OF THE BODY OF THE BICEPS MUSCLE DURING REDUCTION.

A tall muscular labourer, aged 79, who had formerly served as a soldier for many years on the continent, came under the care of Mr. Curling, in the end of August. He had fallen out of a cart, and had pitched on his left elbow; the result of the accident being the displacement of the humerus to beneath the clavicle. The following symptoms existed:—The acromion was rendered very prominent, particularly its outer border, flattening at the outer and back part of the deltoid; a somewhat unusual fulness at the front and inner part; so that the depression, which is usually more or less observed between the borders of the great pectoral and that muscle, was lost. The head of the bone formed a prominent tumour, about half an inch below the clavicle; the axis of the humerus was directed downwards, outwards, and slightly backwards. The arm was nearly an inch shorter than the right, measuring from the acromion to the olecranon. The pain he complained of was most intense, both in the axilla and in the fingers; more severe, however, in those supplied by the median nerve than by the ulnar. The slightest movement to the limb produced to all appearances intense agony. I never remember to have seen any case of dislocation in which the suffering was so great. An ineffectual attempt was made to reduce the dislocation by the heel in the axilla, &c. The man was then placed in the sitting posture, a strong towel was passed round the scapula, and held firmly by several assistants; a wet bandage and another towel with the close hitch having been adjusted to the lower extremity of the arm, extension was made in almost a horizontal direction, with a slight inclination, however, backwards. It was kept up for three or four minutes by five or six assistants; and, on the head of the bone having apparently reached the level of the glenoid cavity, it was pressed backwards by the hand of the surgeon, the extending power was relaxed, and the bone gained its normal position with an audible snap. Immediately before its reduction the patient said that he felt as though some one had given him a tremendous blow on the front of the shoulder. On examining the man several days after the accident, ecchymosis was observed along the entire course of the biceps muscle, and at the lower third of the arm—on extension of the fore-arm having been made—a large hollow existed in which three fingers could be placed transversely, and which had arisen from the rupture of the belly of the muscle. At the end of six weeks the patient had but little power of moving the extremity, complained of great pain and stiffness about the shoulder-joint; and, though the fore-arm had from the time of the reduction of the dislocation been kept carefully flexed on the arm, no union of the separated fasciculi had taken place, the ruptured belly of the muscle being thrown into a remarkable prominence, rendered particularly evident by the great depression immediately below.

Remarks.—Although it is stated by Sir Astley Cooper, in his treatise on dislocations and fractures of the joints, that "the pain attending this accident is slighter than when the head of the os humeri is thrown into the axilla;" the pain observed in this instance, on the contrary, was one of the marked symptoms, and was fully accounted for by the fact which was ascertained in a dissection of a case of this kind, conducted by Mr. Curling, in a man who was brought in dead into the London Hospital some years back. "The axillary nerves with the artery and vein were forced from their natural position to the *sternal side of the head of the humerus, which made considerable pressure on them.*" The difficulty in reduction also was explained from the fact of the long head of the biceps in that dissection being found situated between the great tuberosity and the head of the humerus so as to prevent the passage of the latter to the glenoid cavity; and during extension this tendon was rendered more tense in proportion to the *degree of force applied* for the reduction of the bone. This also explains the reason of the laceration of the body of the biceps itself in the case under consideration. The os humeri was afterwards readily replaced, says Mr. Curling, in the glenoid cavity by turning the tendon with the handle of a scalpel over the head of the bone.(a) Such being the impediment to reduction, it becomes, in similar instances, a matter of great importance to apply the extending force to the lower extremity of the arm, and to bend the fore-arm during the process of replacement, in order to relax as much as possible the biceps muscle. Should this not succeed, and an amount of force have been used amply sufficient in ordinary dislocations to reduce the bone, it then becomes a matter for consideration whether the same line of treatment adopted in dislocation of the first phalanx of the thumb should not be had recourse to, viz., the division of the tendon which forms the impediment to replacement.

The sensation that the patient experienced on the reduction of the bone is worthy of remark, as resembling that that usually takes place when the plantaris muscle is ruptured by sudden action.

ST. THOMAS'S HOSPITAL.

By Dr. CHARLES KIDD.

ENCEPHALOID DISEASE OF THE PERICARDIUM

Two very marked cases of malignant disease lately in this hospital possess considerable interest. One has terminated fatally; and, among other lesions after death, very extensive encephaloid disease of the pericardium was found. In the other case—cancer—Mr. Simon has been trying the application externally of anhydrous nitric acid.

The possibility of the occurrence of encephaloid disease in the pericardium, where we have distinct cacohæmia present in the system, though not perhaps noticed much by authors, in a practical point of view is of interest; for previous to the external indications of fungus hæmatodes, or any of its allied forms of heterologous formation, we may have all the phenomena of pericarditis depending on this abnormal deposit.

Catherine Murray, aged 16, was admitted into Thomas's May 28th; her occupation is that of servant. The young creature has that peculiar wan cachectic appearance so diagnostic of malignant disease; her history, also, but too well agreeing with that of the majority of these cases. Beginning imperceptibly, the disease first attracted attention in the orbit, and has continued to increase till the eye has been completely destroyed. Her general health has not suffered much, though there is but too much cause to look upon the disease as strictly constitutional.

The subsequent reports all agreed as to the gradual increase of the tumour of the orbit, which slowly, but uninterruptedly, continued to ulcerate through the roof of the orbit, ultimately pressing on the brain, producing head symptoms, and death on the 29th of October.

The diagnosis and pathological origin of malignant diseases, though perhaps the most discussed, is perhaps the most puzzling of the questions that come across the path of the practitioner in hospital practice (for, as a general rule, all doubtful cases are sent to hospital). Our best pathologists too at present look on the subject from different points of view, which adds a little also to the obscurity; the microscopist, the pure physiologist, the purely practical surgeon, and the chemist, have each in turn tried to solve the difficulty; but it is by combining the knowledge gained by each that we are in a condition to arrive at any safe conclusion; up to the present I may say, with a considerable amount of truth, we are without any definite and unerring test as to what we are to consider malignant or non-malignant disease. The microscope has done much; but, like the stethoscope, we cannot in practice trust to it by itself. The presence of

(a) For a full account of this dissection see Cooper's Treatise on Fractures and Dislocations, 1842, p. 386.

certain cells such as were presented in this case under the microscope at Thomas's does not infallibly point out cancer under all circumstances, but, *taken together with* other circumstances, the pale, wan condition of this patient, her age, the seat of the disease in the orbit, the contamination of the adjacent glands, &c., the prognosis proved to be but too truly of the most fatal character. Like tubercle and other malignant growths, however, the microscope does not yet teach us the origin of colloid or encephaloid disease, and where we are in doubt the practitioner will do well to give the benefit of the doubt to his patient. In improving the condition of the blood he at least loses nothing, and in destroying or cutting out the tumour, a *nidus* for the disease is destroyed also. If, like tubercle, encephaloid begins in the lymph, and is in all probability a dead or only half-vitalised protein formation, occurring in the young from want of energy, perhaps of the ganglionic nerves, the sooner in practice we strive to reverse all these conditions the better.

In the case under consideration, there were few, if any, symptoms to denote serious disease or functional disturbance of any kind, till the latter stages of the destructive process going on in the orbit, when symptoms of pressure on the brain became very manifest, the patient dying of this complication.

After Death.—On removing the calvarium, and taking out the brain carefully, the latter was found mixed up with the external tumour; where the brain ended and the tumour began was difficult to determine; the arachnoid and dura mater, as well as the roof of the orbit, were all ulcerated away, the soft brainy matter of the tumour mixed up with the brain itself. Some of the other organs of the body were also diseased; in the abdomen, the spleen was very much enlarged; the pancreas was also enlarged and scirrhous; the stomach presented nothing unusual; the kidneys were healthy, but the renal capsules were very much diseased and cancerous. In the chest, the lungs were comparatively healthy; the appearance of the heart and pericardium, however, was most remarkable: the latter was studded *thickly* with large masses of soft cancerous matter, among which we detected one of the usual white fibrinous spots, the mark of old pericarditis. The left ventricle at the back of the heart, when *in situ*, was chiefly diseased. Such a complication was not at all suspected during life, nor was the heart examined, but it seemed physically impossible that it must not have given rise to extensive exocardial rubbing sounds, and should make us careful, perhaps, not to ascribe all such sounds to pericarditis, especially in the young, if encephaloid exists, or is even doubtful.

This disease, we need scarcely say, was well known to Laennec: he described it in an encysted shape; an unencysted; and infiltrated or diffused, the soft cancerous matter blended, in various proportions, in the particular organ or organs in which it happens to be deposited. It seems evidently one of those blood diseases of which Mr. Ancell has given such an excellent and elaborate account in the pages of the *Medical Times*. Like true cancer, it invades the absorbent glands, converting them into a similar matter to itself. It differs from cancer, in not containing fibres or scirrhous nucleus, but being homogeneous, of a soft, pulpy, or brain-like consistence, and contained in fine septa. It is a disease more peculiar to young subjects; cancer chiefly attacking patients about the age of 50, and going on from scirrhus, through all the familiar changes, to open ulcer; encephaloid, on the contrary, taking on the bleeding form rather than ulceration. The treatment of this disease consists in improving as much as possible the condition of the blood, and, where possible, extirpating the local disease. Among the means for effecting the latter, Mr. Simon has been trying, with apparently good effect, the anhydrous nitric acid in the following case, the knife being inadmissible:—

Jane Macombie, aged 60, came into hospital October 1, 1850, with an old and inveterate eruption of the face of a squamous character, on which there is engrafted, at the angle of the jaw, a large carcinomatous tumour. The removal of the latter by the knife does not seem advisable; its base is so broad and spread over the jaw. Mr. Simon hopes, by the steady application of the anhydrous acid for some time, to effect its removal. The woman's system is very evidently much pulled down by the ulcer of her face; yet the case is one in which the trial is worth hazarding.

Several cases of cancer and cancer-like growths have been lately in Thomas's, in addition to those above-mentioned. We may mention also the following:—

Eliza Renn, aged 48, came in November 19, under the care of Mr. South, with a tumour of the left breast. On examination, it proved an ordinary case of scirrhus. On Saturday, Nov. 30, Mr. South removed it. The woman was put under the effects of chloroform, two elliptical incisions, and all was over. On examination, subsequently, of the diseased mass, it differed little from that of another case, a man with cancer of the lip and commissure, removed also on Saturday, by Mr. le Gros Clark. Both operations were well performed; the cases now going on well.

Mr. Solly also has had a case of encephaloid this week. The difficulty, indeed, at Thomas's and Guy's is *not* to meet those cases under every possible shape and phase.

It has been said, encephaloid does not arise from disease of the blood; if not, it is difficult to say whence it arises. Sir Robert Carswell long since stated, that encephaloid was a molecular deposit from deranged nutrition, and our later experience has tended very fully to corroborate his views. Laennec thought it vascular; but this can scarcely be the case, as, under the microscope, we detect little else but some of the infinite series of nucleated cells only, without the peculiar fibre of some other forms of malignant growths. The microscope has not yet succeeded in pointing out any diagnostic appearances of malignant and non-malignant growths; it has done much, however, in showing the origin of cancer and these allied diseases.

The highly-interesting fact, described by Ascherson, that a drop of oil cannot come in contact with albumen without being enclosed in a vesicular membrane—that rubbing oil and albumen together resolves them into granules identical with those found in animal fluids—that every kind of blastema deposits those elementary granules, these, united, constituting nuclei, which merely require to take place in the animal body to have the characters of vitality attached to them; the practical fact, that the molecular element is the basis of all living tissues, a view not contrary but in advance of that of Schwann, who considered, I need hardly remark, the cell as the primary form of life; the very great probability that cancer or encephaloid is not a new growth; every thing, in fact, tends towards a solution of the difficult problem, what cancer really is. There is no doubt that the nuclei in cancer and cancer-like growths are produced precisely similar to those in the normal textures of the body. That there is a diminished or altered vitality of the blood plasma, is all that we can assert with any amount of certainty. The nuclei of cancer, like those of other cells, may be produced by the aggregation and melting together of molecules and granules, producing new nuclei and cells, which all microscopic observers have seen in their thousand forms, or the original nucleus may expand and we have an outer cell wall,—a new nucleus produced within it by the deposition or melting together of granules. Free nuclei, again, in a fibrous stroma, to the young microscopist, may be still quite different, namely, the result of disintegration—of breaking down not building up of tissues, nay, both processes may even be going on together. One of the chief sources in hospital researches, perhaps, of the multiplicity of cancer growths and cancer cells, is this arrest of development from constitutional causes and treatment; there are no granules distinctive of cancer nucleoli and nothing distinctive infallibly of cancer cells; nothing but constant histological research and study of the history of each case, to mark out cancer cells from epithelium or pus cells. Treatment may arrest the disease, and a change in the constitution of the blood from different hygienic conditions, or from cutting out a cancer growth and thus preventing the seeds of the disease spreading, may alter the microscopic appearances; but the microscope alone will tell very little.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

By Mr. FOOTE, M.R.C.S.L.

AMPUTATION AT THE TROCHANTER.

W. Way, aged 21, a druggist, was admitted under the care of Mr. G. Guthrie, on Friday, November 8th. He states, that about two years ago, he perceived a slight swelling on

the fore part of the thigh; he thought nothing of it, until, at the expiration of some months, he found "it was increasing in size and accompanied occasionally with a little aching pain." It is now a very extensive tumour, situated a little below the hip joint, and extending completely round the thigh; it was pronounced by Mr. G. Guthrie to be malignant. The patient (who has but delicate health) is very anxious to undergo the operation proposed by Mr. G. Guthrie, viz., amputation at the hip-joint.

Saturday, Nov. 16, the patient having been prepared, was this morning put under the influence of chloroform by Mr. Hogg, and Mr. G. Guthrie performed the operation. First, the limb was taken off at the trochanter, and finding that the disease did not orginate in the bone, the head of the femur was not removed. About an hour elapsed before the patient quite recovered from the effects produced by the chloroform, &c.

Vespere.—Going on as well as can be expected. Has had mxxx. of liq. opii. sed. twice since the operation.

17th, a.m.—Has had a very fair night's rest, and feels comfortable. To go on with the opium every four hours.

17th., p.m.—No untoward symptom has occurred during the day. Messrs. Travers, Stanley, Bransby Cooper, &c., saw him in the course of the day, and pronounced him progressing very favourably; the pulse, however, has been up to 140, but is not quite so high now.

18th, a.m.—Has had an excellent night's rest; pulse reduced to 130.

18th., p.m.—Pulse about the same as this morning. To have mxx. liq. opii. every four hours instead of xxx.

19th, a.m.—Good night's rest; pulse 125.

19th, p.m.—The stump was dressed by Mr. G. Guthrie this morning; all the parts appeared healthy, and the patient seems to be going on well.

20th.—The pulse this morning is about the same as yesterday; the tongue is much cleaner; the stump was dressed; granulations appeared to be forming. The patient did not complain of pain, and is still doing well; his bowels have been acted upon by a little sennæ infus.

21st. Still going on very well, rests well at night, and feels very comfortable; pulse somewhat under 100. He is going on with the opium, and having beef tea, wine, stout, &c., all of which he enjoys much.

22nd.—Slept well last night; pulse again 100.

23rd.—Pulse under 100; tongue moist. Union is taking place rapidly, and no unpleasant symptom has yet occurred.

24th.—Much better in every respect.

25th.—Ditto.

26th.—Pulse reduced to 85, and the patient is going on as well as possible; not one unpleasant symptom having occurred since the operation.

27th.—The patient may now be considered as out of danger. He eats well, drinks well, sleeps well. Some of the ligatures on the arteries have come away, The wound has healed one half by first intention, and the lower half looks thoroughly healthy. He can turn himself round in bed, and only complains of not being allowed to get up.

It is worthy of remark that the entire treatment of this case has consisted in feeding and supporting him in every way; the only medicine he has taken being opium and one dose of haust. sennæ.

Dec. 4.—The man is going on exceedingly well, with an excellent appetite. He is quite out of danger. All the ligatures have not yet separated.

Morality of London and Paris.—In London, 26 illegitimate births take place for every 1,000. In Paris, the proportion is 316 per 1,000. The number of illegitimate children annually born is therefore twelve times greater in Paris than in London. 5,000 children are abandoned every year by their parents in Paris; in London 1,000. The number of cases of infanticide in France is twelve times greater than in England. These results are mainly attributable to the system of foundling hospitals.—*Benjamin Delessert.*

At Camberwell, lately, the two infant children of a journeyman carpenter, named Buckley, were poisoned by an over-dose of Godfrey's cordial, administered by the mother. The jury at the inquest strongly condemned the use of the drug. When will the Government make the sale of this and of other poisons a misdemeanour?

A new form of licence to retail chemists and druggists has lately come into force, respecting the sale of patent medicines. The licence is issued from the Board of Inland Revenue, and is, as the old one was, annual. Its cost is 2*l.*

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK

This Evening,	December 7.	Medical Society of London. *Subject*:—Mr. W. Cox on the Pathology and Treatment of Crowing Inspiration. Eight o'Clock.
Tuesday,	December 10.	Royal Medical and Chirurgical Society. Eight o'Clock.
Wednesday,	December 11.	Microscopical Society of London. Eight o'Clock.
——	——	Pharmaceutical Society of Great Britain. Nine o'Clock.
——	——	Ethnological Society. Eight o'Clock.
Thursday,	December 12	South London Medical Society. Half-past Seven o'Clock.
Saturday,	December 14.	Guy's Hospital Physical Society. Eight o'Clock.
——	——	Medical Society of London. *Subject*:—Mr. H. Haynes Walton on the Removal of Diseased Bone in Certain Cases of Morbus Coxarius. Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, DECEMBER 7.

MEDICAL RELIEF.

The instances of destitution which we have recently made known to our readers, and which have been so nobly responded to, naturally suggest some considerations relative to the whole subject of our medical charities, and the existing means for meeting the manifold evils and misfortunes which beset so many of our brethren.

The institutions existing in this country for supplying pecuniary aid to medical men and their families may be divided, we think, into two classes: 1st. Those which confine their assistance to their own subscribers, their widows, and orphans. 2nd. Those which extend their aid generally to all medical men and their families, without any limitation as to subscription to the relieving fund.

Under the first head come the London Society for the Relief of Medical Men, their Widows and Orphans, and many other provincial societies of the same kind at Birmingham, Exeter, in Yorkshire, Surrey, &c. The whole plan and principle of these societies is expressed in their very title—they are simply for affording relief to the subscribers and their families, according to the amount of the funds subscribed for this purpose by the members, this relief being supplied in the form of donations or annuities, as the case may be. They are most valuable institutions, and do a great deal of good in their respective spheres. The misfortune is, that they are so limited, both as to number and extent; the whole of them put together not including, probably, one thousandth, certainly not one five-hundredth part of the practitioners of England. To the extent of their influence, however, they are greatly to be commended and encouraged, and have a right to claim the support of every practitioner in their respective localities.

Under the same head comes the society recently established in this metropolis, *The British Medical Fund*; although it is founded on somewhat different principles, and has much more varied and comprehensive objects. If we are not greatly mistaken, the Society is destined to work a complete revolution in the existing arrangements for medical relief, removing this from the field of charity altogether, and placing it on the firm basis of self-sustaining independence. The Society is divided into two parts—a *Provident Branch* and a *Benevolent Branch*. The Provident Branch is strictly a self-supporting fund, being independent of all other sources of supply except the premiums of the members subscribing

to it. The general principles on which this branch is based are thus enunciated in the Prospectus issued by the Society :—

"It is now universally admitted, that the only safe and sure mode of relieving and removing the distresses and difficulties of men dependent for support on their own exertions, is the union and co-operation of the individuals themselves, with the direct purpose of meeting and overcoming the evils to which their particular lot is especially obnoxious. Such is the providential arrangement of human affairs, and such the harmonious relations of events bearing on these, that a system of universal compensation is found to prevail, whenever men take pains to seek for and to evolve it. By means of this principle, most of the inequalities of lot among mankind at large might be successfully coped with, if men made a proper use of their reason, under the guidance of philanthropy and benevolence. All that is requisite to effect this most desirable result is, that the individuals of the co-operating body shall consent, during their ordinary or average state, to make a trifling sacrifice of present means, a mere fractional deduction from some of their present superfluities or indulgencies, or, at most, of their dispensable comforts, in order to provide that general compensating medium, to which they may look in the event of their falling below this ordinary or average state. Those who are so fortunate as not to require such compensation, have, by this arrangement, the gratification of knowing and feeling that they had prepared against the contingency which was as likely to be their lot as another's ; while, at any rate, they have administered to the necessities of their less fortunate brethren who, in a reversed state of things, would have been the benefactors and not the benefited. It is thus that a mere trifle deducted from the weekly, monthly, or annual income of any set of men—scarcely at all missed at the time—may be made to return to them, in the day of their necessities, multiplied a thousandfold ; and stand to them as strength in their weakness, health in their sickness, competence in their poverty, vigour in their old age, and even take the form of blessings to those nearest and dearest to them, when they themselves have paid the great debt which all must pay."

By subscribing a small annual sum to this branch of the Society, members can secure to themselves, their widows and children, any one or more of the following benefits:—

1st. *Deferred Annuities to the members themselves*, varying from 10*l.* to 100*l.*, to commence at any age from 50 to 70.

2nd. *Annuities*, of like amount, to *the widows of members*, to be claimable absolutely, without regard to income from other sources.

3rd. *Annuities to the children of members*, individually or conjointly, to cease on the marriage of the females or coming of age of the males.

4th. *Weekly Allowances during the sickness* or incapacity of members.

5th. *Fixed sums, not exceeding* 200*l.*, *payable at death*, on the ordinary principles of life assurance.

6th. *Endowments for Children*, on reaching a certain age. (a)

It is obvious, that, by taking advantage of one or more of the foregoing arrangements, any medical man may (to a very considerable degree at least) anticipate and eschew many of the evils that press most heavily on the members of the Profession, whether in their own persons or in the persons of the dearer objects of their affection.

But, alas! considering the weakness of humanity, and the thousand other causes that interfere with the exertion of man's prudence,—to say nothing of the manifold inevitable contingencies still crossing human life,—it is not enough to legislate for the wise and the fortunate. Cases of another kind must be provided for,—cases which claim sympathy and demand redress on the broad principle of our common humanity. Truly does the Prospectus of the British Medical Fund tell us "of the occasional occurrence of instances of distress which no foresight could anticipate, and no economical combinations could fully cover:" "Sickness," says this document, "might cut down, death might remove the youthful and the strong before it was *possible* for them to provide sufficiently for the necessities either of the present or the future day ; and, knowing his own weakness of purpose, it does not become any man to pass too severe a judgment even on those who, strong in the hopes of vigorous manhood, may have unwisely put off to a day which never came, that provision for themselves or others which it was their duty to prepare. It must sometimes even happen, that the most perfect arrangements of societies of the mutual kind, like that now instituted,—limited as the total amount securable by the premiums of individual members must necessarily be,—will not be able to cope with the exigencies of exceptionable cases."

To meet cases of this kind, the Society has therefore provided also a Benevolent Branch, to compensate for all short-comings of the Provident Branch. With the view of stimulating medical men to make exertions to preserve their own independence, and thus rise above the level of mere eleemosynary aid for themselves and families, the British Medical Fund has, wisely we think, (at least in its early stage,) restricted the relief supplied by its Benevolent Branch to members and their relatives. This part of the Fund is supported by annual subscriptions, donations, &c., and is expected to reach a large amount in a short time. The following are some of the special modes of relief contemplated by the Society ; but the directors have general powers enabling them to meet every case of distress that may occur among the proper objects of the Society :—

"*a.* To grant advances to such of the subscribers for annuities, sickness-allowance, or life assurance, as may be unable, from sickness or other causes, to pay their premiums when due.

"*b.* To make donations to members who may be disabled by disease, or otherwise in reduced circumstances.

"*c.* To grant relief, under similar circumstances, in special cases, to the widows and orphans, or other near relatives, of members.

"*d.* To augment, by annual grants, the annuities of widows or orphans, when, from particular circumstances, they are found inadequate.

"*e.* To grant loans to members of a certain standing, at low rates of interest, or even without interest, under special circumstances.

"*f.* To grant sums for building, or assisting to build, or otherwise providing cottage-retreats, or other residences, for decayed members or their widows.

We need not point out to the intelligent reader on what a philosophical basis this Society is raised, how noble are its objects, how comprehensive its design, and, consequently, how much deserving the consideration of the Profession for whose benefit it has been planned, by its benevolent founders, with infinite labour and rare sagacity.

The only institution that comes under the second head, to the best of our knowledge, is the *Medical Benevolent Fund*, established by the members of the Provincial Medical Association in the year 1836. This admirable Society is one purely charitable, having regard, in the distribution of its funds, merely to the distress of the applicants. Since its establishment it has been the means of relieving "a mass of misery altogether incalculable," according to the just expression of its excellent Treasurer, Mr. Newnham, of Farnham. This Society has recently taken a wider scope ; and, although still greatly supported by the members of the Provincial Association, looks for aid from the whole Profession. The Committee of Management now meet in Lon-

(a) We believe this last benefit is not yet adopted by the Society, but will be so.

don, under the presidency of Mr. Newnham, to whose indefatigable exertions, it is but justice to say, the Society is indebted for its present great and increasing prosperity.

"This Fund requires no other test or qualification for an admission to its relief than the facts, that the party has been regularly educated—that he is in indigent circumstances—and that his poverty has been the result of misfortune, not of misconduct. In these respects it differs from other funds, which require the qualification of pecuniary membership for a given time, and a residence within a prescribed district; and it is especially devoted to a species of misery which cannot be relieved by the local funds. So that, wherever there exists sickness and sorrow to be soothed, or hunger and destitution to be alleviated, there is ever at hand the peculiar agency of the Benevolent Fund."

It is, therefore, to this admirable Society, that the subjects of such distresses as we have recently laid before our readers should apply; and if their cases will bear the scrutiny of the Committee, they may depend on being relieved according to their necessities and the limited extent of the funds. It is obvious that we cannot ourselves attend to such applications, nor, indeed, do we desire to be the almoners of the Profession. Like the other Societies mentioned, it is unnecessary to say how strongly this Benevolent Society claims the support and patronage of all members of the Profession, and to them we now most anxiously recommend it.

But there is another phase in which the instances of distress that have lately come before us must be regarded. They awaken grave fears respecting the destiny of the hundreds of young men who now crowd our hospitals, and are qualifying themselves for the duties of a precarious and ill-rewarded profession. We understand that this year the number of students has largely increased; a result, probably, of the closure of other avenues to employment by the depression in the railway interest, and the reflux of the tide of enterprise and talent from the engineering profession. We fear that the parents of these young men, constrained "to make a choice of difficulties," will see reason to repent of their selection. Years of toil unremunerated, fortunes wasted, splendid hopes dropping one by one from the tree of promise, withered and dead, as the chilling blasts of experience blow over them, will be the lot of far too many of the ingenuous and aspiring youths who now follow in the train of a Lawrence, a Fergusson, or a Walshe, and are dedicating all their energies to achieve distinction in a profession that will reward them at the best with but a barren laurel. Sadly we declare it, that with our experience of the profession we cannot, for many hundreds of its members, auspicate a better destiny.

Nevertheless, Fortune presents difficulties merely to encourage industry. She is the true educator. Success is the reward of labour, and labour the child of hope. Labour and Fortune are twin born. We cannot predict success for any young aspirant to wealth or honour, but we can tell him how to deserve it,—labour! Take your task, and work at it; thus only can you expect that the mountains will become plains, the valleys filled up, and a broad high-road levelled to the temple where Fortune, waiting to bless, receives her suitors, and soothes with her rewards the multiplied stings and aches of heart and limb which the true-hearted and foot-sore pilgrim has endured to win her smile. Fortune will sometimes be generous without desert, but to desert she will not be unjust. Know yourself well before you accuse your fortune.

THE MEDICAL PROTECTION SOCIETY.

The beginning of the end of the Medical Protection Society has come at last. The Council have issued a proposal to pay to all claimants for sums under 10*l.*, the amounts respectively due to them, on complying with certain conditions specified in a circular letter addressed to the members. The last Act of the Council justifies the opinion we originally pronounced on the affairs of this Society, for the course now adopted is in principle the same as that we long ago recommended to the Council as the only honourable issue of their engagements. After numerous struggles to overcome these difficulties, and several minor devices to avert the inevitable conclusion which our foresight had foretold could be the only solution of the problem, they have resolved to concede the principle of personal liability, and now merely endeavour to reduce the point of honour to the minimum of pecuniary sacrifice. Whilst citing the very acts of the Council to testify to the correctness of our judgment, we must not forget to express our respect for the honourable intentions of Mr. Propert, whose liberality has enabled the Council to realise our recommendations. Mr. Propert has offered to do more than many men would have expected, and enough to elicit the esteem of all. Honour and honesty are not in all cases convertible terms. This gentleman is one of few—who can expiate a weakness by a great voluntary sacrifice, and redeem his honour at a cost which the world generally, judging by a looser code, would be apt to consider was more than it was worth.

Whether the conditions that are annexed to the title to receive their just dues will be acceptable to the members of the old Society is a matter for the members themselves to decide upon; but there can be no doubt that any man to whom 10*l.* are owing, would rather receive 9*l.* than lose all. The Council say that, upon analysing the debts, the number of claimants for sums above 10*l.* were found to be "only about thirty-six, much the larger proportion of whom *were members of the Committee.*" There may be, then, about six or eight hundred pounds still due to the members of the Committee after the smaller debts are paid; and this large amount will be refunded to the Committee out of the *profits* of the Society. In other words, Mr. Propert will pay the claims of the members, and the members will pay the claims of the Committee. The Society will thus be established on the principle of reciprocity. It is a bargain to which the members must submit, or they will get nothing.

As the Council have appointed six trustees of the Society, they evidently contemplate having more money than they will know what to do with. They have also appointed five other trustees of a College Building Fund, to help the first and to take care of the guineas that they expect will be running over the pockets of the Committee in such a redundant stream, that it will take five pairs of hands to catch the golden fall. We fear that the process of paying off the liabilities of the Society will be a very slow one; and that the formation of a College Building Fund, upon this condition, will be deferred till the Greek Kalends. We only hope that no evil will befal the Trustees until the first guinea is paid into their exchequer; and, in view of this contingency, we may venture to predict for them a perpetuity of bliss.

REVIEWS.

The Principles of Surgery. By James Miller, F.R.C.S.E., Surgeon in Ordinary to the Queen for Scotland, &c. Second Edition. Edinburgh: 1850.

Operative Surgery. By Frederick Carpenter Skey, F.R.S., Assistant-Surgeon to St. Bartholomew's Hospital, &c. London: 1850.

Professor Miller has presented the public with a second edition of his work on the "Principles of Surgery." It is

much enlarged, well and carefully got up, and copiously illustrated by excellent wood-cuts, of which some are original; others taken from well-known pathological and physiological works, the source being in each case duly acknowledged. The author especially expresses his obligations to Drs. Bennett, Redfern, and Gairdner, and to Mr. Spence, for having drawn upon their observations on inflammation, tumours, diseases of cartilage, &c.; and we think that this desire of combining modern researches with the well established principles of the healing art, might with advantage be more generally adopted. Although, in the work now before us, the style is hard, and many of the expressions strange to our southern ears, it is a relief to turn to it from the perusal of such a huge fat production as Chelius's wish-wash surgery, enriched with South's notes, taken from the writings of the authors with whom he was familar when a student.

Professor Miller devotes the first thirty-two pages of his work to an historical notice of surgery; this, though well and amusingly written, might have been with advantage left in the last edition of the Encyclopædia Britannica, (where it originally appeared,) had the space which it occupies been allotted to the consideration of venereal affections, a subject scarcely mentioned by the author. When we consider how important it is for the surgeon to render himself intimately acquainted with the different forms of a disease which, pervading all classes of society, leads but too frequently to results seriously affecting the welfare and the social position of perhaps a collection of individuals, it strikes us as being more than surprising that we should have to notice so grave an omission.

The term "inflammation," observes the author, "has been made to include too wide a range of action—from the slightest exaltation of what is healthy to the most disastrous results of ravaging disease." (P. 103.) It will not, however, we fear, remedy an evil which we all have felt, to introduce a difference of meaning between the terms "inflammation" and "inflammatory process." Limit "the term inflammation to what is *essentially morbid* —that is, at variance with healthy function and structure" (p. 103); but do not introduce an almost similar term with another meaning, which shall comprehend the whole range of action, from the blush of shame to the fiery swelling of erysipelas. As regards the theory of inflammation, it is well written. In another edition we shall hear no more, we presume, of the "colourless globules;" but the student may, if previously unacquainted with the subject, render himself here familiar with the changes which take place in the blood and in the vessels which contain it. We have yet to learn that the appreciation of the characters of sizy blood (in which the blood discs collect themselves into rolls) is very important in practice (p. 124). Are we to infer that Professor Miller would, in a doubtful case of inflammation of some internal organ, abstract a drop of blood from the patient, and view it under a microscope, as a means of diagnosis? and the more especially when "it must ever be remembered that the buffed appearance (of the blood) is not of itself a sure indication of inflammation."—(P. 124.)

We must refer the reader to the chapter upon the "Organization of Deposit," illustrated by Bennett's accurate and well-executed drawings. It is a subject with which all should be familiar, as being intimately connected with the restoration of a part to health after disease or injury.

In the chapter upon "Ulcers," we have sixteen different forms of sore,—the weak, the scrofulous, the cachectic, the indolent, down to the constitutional sore. It struck us, that the second, third, and fourth sore must of necessity be weak, and that both in the cachectic and in the scrofulous the constitution was somewhat in fault. We disapprove of this unnecessary multiplication of names. It burdens the memory of the student, and serves not uncommonly to render him who employs them tedious and pedantic.

We pass on to the chapter upon "Tumours," the value of which is much enhanced by numerous woodcuts from the works of Bennett, Liston, &c.

"In regard to the transition of tumours from the simple to the malignant type there is a difference of opinion amongst surgeons; some, like M. Cruveilhier, holding this to be impossible. In this country, however, the occurrence of degeneration is not only admitted by most surgeons, but *considered to be a not unfrequent event*."—(P. 301.)

We presume that to be the opinion in Scotland as regards this important point. Here there are but few who would yield assent to the latter sentence. It has doubtless happened to most in extensive practice to meet with a case in which some such supposed transition has been suspected and discussed; but positive proof has in all instances been wanting; and, taking into consideration the extreme rarity of such cases, the commonly recognised course of tumours, both simple and malignant, when watched over a number of years; the fact that cancer, when deposited in a spot the size of a pin's head, is as well marked as when occupying an entire organ; and that simple tumours consist of nothing but fat, fibres, and other similar tissues, when of the largest bulk, we should certainly not express so decided an opinion as that here enunciated by Professor Miller.

This is not merely a theoretical question. No one who holds it could conscientiously allow a patient, the subject of a tumour, however harmless, to delay undergoing an operation for its removal; the worse the patient's health the greater the danger of "cachexia" and its attendant evils; consequently he who maintains this view would find himself compelled, in support of his theory, to give an opinion which his own better judgment would repudiate.

The divisions of "aneurism" are so various, that the word has become almost "unfit for use." In Mr. Skey's work there is an excellent classification, arranged in a tabular form (p. 209), where the reader may see more at one glance than he will acquire from pages of common description. Those who have done their best to spoil so good a term as "aneurism" deserve but little thanks from the Profession.

We wish we could terminate this review without a word of grave remonstrance to Professor Miller, that his concluding passage should contain allusions wholly irrelevant to the principles of surgery, and not at all suited to the place wherein they appear. Is it at the fag end of a chapter upon chloroform that our feelings of reverence for Him who made us are to be expressed; are works professing scientific research to be recommended to the public by language which more properly belongs to forms of prayer or to works of divinity. Doubtless he who for one moment ceases to be grateful for the blessings by which he is surrounded, is guilty of a heinous offence; but we ask Professor Miller how would medical literature rank amongst the productions from other learned bodies, if the example which he has set were to be generally followed.

Between the works of Miller and of Skey there is a gap still to be filled up; the former author having confined himself to the principles of the healing art; the latter having embodied, not only such principles as should constitute a permanent guide to the practitioner of operative surgery, but likewise the practical rules required to justify an appeal to the knife. A good "system of surgery" would be thankfully received by the Profession.

Mr. Skey wishes to see "this essential department of medicine (operative surgery) occupying its just position—a position neither too exalted nor too low—in the esteem of the Profession." He warns the younger member against being led astray by its brilliancy, its *eclat*, its critical influence on disease; but he impresses upon all the necessity of making it a study, that those who profess themselves surgeons may execute the task allotted to them fearlessly and well:—

"There is a position which operative surgery is entitled to hold in our esteem, and which, so long as it does not clash with nor interrupt the studious and persevering effort of the surgeon to render its aid necessary, must ever rank amongst the most valuable departments of scientific medicine."—P. x.

The chapter upon dislocations contains the author's views upon a subject which has occupied his attention for a considerable number of years:—

"A bone, once displaced, remains dislocated, in consequence of the tension of the muscles inserted into it, which become the subject of a passive contraction. . . . But no sooner is the attempt made to elongate the limb, than the same muscles, one and all, start into sudden and positive contraction, as though for the express purpose of preventing the descent of the bone."—P. 60.

When the head of the bone is brought beyond the edge of the socket which should receive it, the muscles forthwith complete the reduction; and Mr. Skey denies the right of surgeons to take credit to themselves for reducing the bone by such manœuvres as rotation by the hand, &c.:—

"The immediate act of reduction is effected by the muscles and by them alone. Remove the obstacle, bring the bone downwards, and the socket will receive it with avidity by the agency of its

own muscles. The agents for extension *should not be applied* on the dislocated bone. That for the humerus should be placed round the wrist; that for the femur round the ankle."—P. 67.

We refer the reader, for the grounds upon which these directions are given, to the chapter from whence our extracts have been taken.

Some admirable remarks are contained in the chapter upon Amputations; the less frequent resort to the operation in the present, is duly and deservedly noticed by the author; and, in the directions given for the selection of cases for operation, we think the following passage deserving of being deeply inscribed upon the memory:—

"In order to justify an amputation, whether of a part or of the whole of a limb, the question of recovery by other means must be placed beyond all doubt. Every means compatible with the means of the patient should have been exhausted. Should any doubt exist in the mind of the surgeon, the patient should receive the benefit of that doubt. . . . . Presuming that every expedient that skill can suggest has been adopted, and without success, the amputation may be performed."—P. 305.

We believe this to be the right view in the question of amputation. There are many cases in which a patient would be undoubtedly safer without than with a maimed or a diseased limb; but he is in most instances prepared, if the surgeon gives him encouragement, to run some personal risk with the chance of recovery without mutilation. On the other hand, a patient is but little satisfied if, after months of suffering, he be pronounced "recovered," but with a limb which is not only useless, but a source of constant pain to him. This point is one upon which, of all others, the matured opinion of the surgeon of experience should be listened to with respect and attention; and well and ably has Mr. Skey handled his subject.

The directions given for operating are concise, clear, and accurate. Numerous wood-cuts illustrate this part of the work, and show the line of incision, its extent, and the relations of important parts beneath the skin. Mr. Skey's long connexion with a theatre of anatomy is a sufficient guarantee of the truthfulness of the representations.

Our limits prevent our quoting some excellent remarks upon the division of the sac in hernia. It appears that the operation so powerfully advocated by Mr. Luke and the late Mr. Key receives a more qualified approval from Mr. Skey, and from some, at least, of his colleagues. The arguments in favour of the division of the sac deserve careful perusal. Mr. Skey properly expresses his contempt of that antiquated bit of nonsense, "which has, too long for the welfare of humanity, referred the cause of strangulated hernia to spasm of the muscles." We wish this doctrine, with the anatomy moulded to suit it, were erased from the pages of our literature.

In conclusion, we must express our unqualified praise of the work as a whole. The high moral tone, the liberal views, and the sound information which pervades it throughout, reflect the highest credit upon the talented author. We know of no one who has suceeded, whilst supporting operative surgery in its proper rank, in promulgating, at the same time, sounder and more enlightened views upon that most important of all subjects, the principle that should guide us in having recourse to the knife.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

PROFFESSOR SCHOEPF MEREI ON CHILDREN'S HOSPITALS.

As the establishment of a children's hospital in London is in contemplation, a few hints on the subject from the able Director of that of Pesth, contained in a letter addressed to M. Trousseau, of Paris, may not be unacceptable. Dr. Schoepf Merei considers two conditions for such hospitals to be quite indispensable:—1. To the second year, and in some cases to the third, the mother or nurse of the child should be admitted and kept with it. At Pesth she is so, if she becomes ill, even if she has weaned her child, and it continues well. 2. The hospital ought to be divided into numerous compartments, so that each need contain but a small number of beds. At Pesth there are six wards, each containing from three to twelve beds, so that acute diseases of the skin can be separated from others. In spite, however, of every precaution, children who are brought to the clinic for more trivial ailments, very frequently contract variola, rubeola, or scarlatina; and acute catarrhal affections often increase to the extent of constituting *contagious hospital epidemics*. This is seen especially in certain inflammations of the mucous membranes, viz., *catarrhal ophthalmia, bronchitis, and dysentery*. The rapidity with which the *contagium* in acute affections of the mucous membranes of the eyes and eyelids becomes developed among children is astonishing. Two little children suffering from slight catarrhal ophthalmia were accidentally placed together in the same room, and speedily others who were near them became affected, and, but for active treatment and rigid separation, every day would have seen the disease augment. The greater number of children in the ward, the more intense the *contagium*, and it then propagates itself to constantly increasing distances, without any individual contact whatever occurring, constantly increasing in severity and obstinacy. Such an ophthalmic epidemic has never been observed in the wards of the adults, where dysentery, however, sometimes takes on a malignant epidemic form. The benefit of numerous subdivisions in the children's ward is seen by comparing the effects of this hospital ophthalmia in Paris and in Pesth. In the former city large numbers of children are assembled together, and ophthalmia is a constant nosocomial epidemic, acquiring such virulence as to require the most active and repeated employment of strong nitrate of silver lotion, which yet does not prevent many becoming blind who had been admitted perhaps for some trifling affections. The nitrate of silver lotion is also required at Pesth for the *ophthalmia of new-born infants*, in subduing which it acts almost as a specific; but for the *hospital ophthalmia* it is very rarely indeed required, the diligent application of cold water, and the use of purgatives sufficing. Many hundreds of such ophthalmias have thus broken out in the hospital, and the disease, thus simply treated, has lasted from four to twelve days; but no child has ever lost its sight in consequence of it. Dr. Schoepf Merei considers the filling the wards of children's hospitals with from thirty to sixty beds, is neither more nor less than to prepare a hot-bed for hospital diseases, and to destroy a large portion of the good these institutions are capable of conferring. The differences of age of the children, and the very different kinds of attendance they require, as well as the powerful contagiousness of their diseases, necessitate numerous subdivisions more or less completely separated from each other.—*L'Union Médicale, No. XXVIII.*

ON AN EASY MODE OF REDUCING A DISLOCATED FEMUR.

By Dr. MAYR.

Dr. Fischer, of Cologne, published in *Casper's Wochenschrift*, No. 1, 1849, an account of his mode of reducing dislocation of the femur, and which consists in flexing the femur to an acute angle with the trunk, and impressing upon it gentle rotatory movement while in a state of adduction if dislocated on to the pubes, and of abduction if dislocated on to the ilium. Dr. Mayr, without being then aware of this procedure of Dr. Fischer, resorted to it in a case that occurred lately to himself. A man, aged 31, dislocated his right femur upwards and backwards; and, after repeated attempts at reduction, even by the pulleys, had been made, the author was called in on the 13th day after the accident. After he had in vain tried the ordinary plan of extension and counter-extension, he resorted to the following means. The opposite limb and the pelvis were fixed, the operator flexed the femur upon the trunk, and, passing one arm under the ham while he grasped the calf with the other, he imparted rotary movements of gradually increased strength to the limb. As soon as he perceived a greater mobility of the head of the femur, he brought the limb into a state of strong abduction, and when, still continuing the rotation, the head had approached the acetabulum, he was able, by a rapid and strong pull inwards, to slide it into its pan, which it entered with a loud noise. The gentle rotatory movements mentioned by Fischer did not succeed here, all his force being required in their production, which may be probably due to the time the bone had remained unreduced.

The anatomical structure of the parts also recommends this procedure. In front of the thick edge of the acetabulum, the under surface of the ilium forms a perceptible

depression, and if the directions given in the manuals are followed, of making the traction obliquely from outwards inwards, and somewhat from behind forwards, be followed, the head of the bone must meet in this depression with a considerable obstacle to its progress. This sometimes even invincible obstacle appears to be avoidable by resorting to abduction.—*Casper's Wochenschrift*, 1850, No. IX.

SUCCESSFUL CASE OF TREPHINING IN A CHILD.

By DR. ARNOLD, of Posen.

A boy, aged 6, (October 10,) while swinging in the arms of a man, pitched on the right side of his head on to the pavement. He walked home, some 150 paces, and desired those who accompanied him not to tell his parents. Arrived, however, he soon tottered, spoke unintelligibly, and became unconscious. Several practitioners saw him, and the general opinion was, that he was suffering from concussion of the brain. Considerable sugillation at the site of injury existed, but no depression could be felt. Dr. Arnold expressed his conviction, that the child was suffering from compression due to the effusion of blood, grounding his opinion upon the symptoms present, and upon the fact of the temporary retention of consciousness after the accident. The child continuing to get worse, the application of the trephine was at last agreed to. During the incision of the scalp about three ounces of blood were lost from a branch of the temporal. A fissure was discovered stretching from the external angle of the orbital portion of the frontal bone to the upper and anterior part of the squamous suture, (which, for about an inch in length, had yielded from its parietal connexion,) and a smaller one extending from the middle of the suture along the parietal bone. The crown of the trephine was placed at the point of juncture of the large fissure and the suture, and the cranium soon penetrated. A thick coagulum now forced itself into the aperture, the removal of which proved a very tedious procedure ; and so great was the quantity of blood effused between the skull and dura mater, that the excavation seemed a full inch in depth, extending downwards towards the orbital plane, and upwards to near the falx, and backwards to near the lambdoid. The quantity of blood removed thence amounted to full three ounces, and as this became diminished the expansive power of the brain, expelling the blood towards the opening, facilitated its removal. When this was accomplished, the pulse, which had become very small prior to the operation, rose, and the child's sensibility was restored. On the third day, reaction required appropriate measures, and the patient went on uniformly well, so that by the 24th December cicatrization of the external wound was complete.—*Medicinische Zeitung*, 1850, No. XI.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

OPENING OF THE SESSION.

The medical session has been opened in an unpretending manner by the usual distribution of prizes and by a discourse from Professor Velpeau. As almost everything connected with medical lecturing is concentrated in the school of the faculty, we have none of the bustle or emulation which distinguishes the opening of your schools in London, where competition puts every man on his mettle, and renders activity such an essential ingredient of success.

The number of medical students does not appear to have gained any accession since last year. Indeed it has been gradually declining ever since the Revolution, and, as 1851 does not hold forth much prospect of being more tranquil than its predecessors, people incline to keep their sons at home rather than expose them to the dangers of political convulsion in the metropolis.

The benches of the vast amphitheatre at the School of Medicine were, therefore, occupied in a very scanty manner. The visiters, also, were "few and far between;" for, by mistake, no cards of invitation had been issued to the Academy of Medicine or other learned bodies connected with medical science. Whether from this circumstance, or from actual incapacity to perform a task which is ill-suited to his tastes and qualities, Professor Velpeau treated us to a discourse of a very *mediocre* description. The life of Marjolin was his theme, and on this he dwelt for an hour and a half in the style and spirit of a "penny-a-liner." Every little anecdote connected with the private history of Marjolin was carefully noted and copiously retailed for the amusement of the auditory ; but one sought in vain for any general views, or accessaries derived from science which might relieve the monotony of a daguerreotype portrait, and raise the mind from the contemplation of a man, to the great art which rendered him illustrious.

M. Velpeau's performance, therefore, was coldly received, and would have terminated without any incident worthy of notice, had he not, unfortunately, bethought him of mixing up polities with biography, and alluding to "certain crises and catastrophes which leave nothing behind them except ruin and destruction." Now, as the term "catastrophe" is at present the fashionable court name for the Revolution of February, you may conceive what a hubbub this untoward expression excited amongst the youthful patriots of the *quartier Latin*. One would have fancied that each juvenile Æsculapius had his serpent with him, and that the reptiles had suddenly struck up a monster concert. The hissing had an awful effect on the ugly countenance of Velpeau ; but, after an inward convulsion or two, he assumed an outward show of indifference, and wound up his harangue in an abrupt manner.

EFFECTS OF VACCINATION ON MORTALITY.

Many statistical writers have endeavoured to depreciate the value of vaccination, by asserting that the discovery of Jenner has only given rise to a displacement of mortality; in other words, that it has effected no saving of human life, because those formerly cut off by small-pox now fall victims, in just as great proportion, to other diseases. M. Carnot, son of the well known republican minister, is the principal advocate of this doctrine in France. He has recently offered what he calls a demonstration of its truth in the three following propositions :—

1st. "In less that fifty years the mortality of persons between 20 and 30 years of age has doubled."

M. Carnot proves this proposition thus :—From the registers of two tontines, M. Deparcieux ascertained that the mortality between 20 and 30 years of age, in the year 1746, was 80 in 814, or about 10 per cent. In 1802 the general mortality of France showed a proportion of 49 per 1000 for the deaths between 20 and 30. If we now turn to the present period, we find from official documents that the mortality of the troops in the interior of France is 2 per cent., and hence the mortality between 20 and 30 is 20 per cent. Again, from the mortality bills of Paris (1840-47), it appears that the proportion of deaths between 20 and 30 was 132 per 1000, or more than 2½ times greater than that laid down by Buffon.

2nd. "Diseases of the lungs have not increased among persons between 20 and 30 years old."

In 1817 the proportion of deaths from these diseases was 35 per cent. in 967 deaths.

Twenty years afterwards Dr. Michel found the deaths from pulmonary affections to be 32 per cent. in 159 deaths.

3rd. "The increase of mortality arises from diseases of the digestive organs—as inflammation of the abdomen, typhoid fever, &c."

This proposition is also proved from the statistics of Dr. Michel at Gros-Caillou. The proportion in 491 deaths was 243 for the year 1838, or nearly one-half the whole. Hence, asserts M. Carnot, the transformation of mortality is due to the introduction of vaccination; because we find that the danger of death for persons from 15 to 20 years of age commenced from 1816 to 1821, for those of 20 to 25 years from 1821 to 1826, for those of 25 to 30 from 1826 to 1831, and so on.

The statistics of M. Carnot, who enjoys some reputation here in that line, are rather limited, though his faith is immense. The question requires further investigation: who is better capable of throwing light on it than Mr. Farr?

A very severe epidemic of small-pox has recently attacked the town and neighbourhood of Verdun. The disease prevailed exclusively amongst the adult population, although nearly the whole had been vaccinated. Not a single child was attacked. This curious fact is calculated to re-open the question of revaccination.

The cholera has not yet disappeared from the town of Algiers. Although the number of victims is comparatively small, the proportion of deaths to cases is excessively great. Thus, according to the last accounts, 12 cases occurred on the 29th and 12 deaths ; on the 30th, 7 cases and 7 deaths. In the military hospitals the mortality does not exceed 50 per cent.

SCOTLAND.

PROJECTED CHANGES IN THE EDINBURGH MEDICAL SCHOOL.

The unruffled quiet which for many months past has reigned in our Edinburgh Medical circles got a shock, little short of an earthquake, last Saturday afternoon, when the news escaped, that a scheme, involving extensive changes, had been matured in secret, and sufficient influence secured to carry the same into immediate effect. The prominent feature of this scheme is, the endowment of a chair of clinical medicine by the managers of the Infirmary, to supersede the method of clinical instruction pursued ever since Edinburgh became famous as a medical school. The plan is, to elect Dr. Bennett, the present professor of the institutes of medicine to the new chair, and to supply his place by Dr. Sharpey, from University College; and all this without a whisper of such an intention to Dr. Bennett himself, or to the other clinical professors, who are thereby sent to the right about, or to the Infirmary Board, or to the Town Council, the respective patrons of the projected chair, and of the chair to be vacated, or, for anything we know, to Dr. Sharpey himself.

The merits of the scheme stand apart from the objectionable mode in which it has been concocted. If it be advisable to appoint a professor, whose sole business shall be clinical instruction, instead of dividing the duty of each year among three or four of the professors of medicine,—the method by which Edinburgh gained its reputation as a school of practice,—a better incumbent for the chair than Dr. Bennett could hardly be found; he is young, active, and earnest in the pursuit of pathological and practical knowledge. On the other hand the students, by the system which it is proposed to supersede, enjoy at present the advantages derivable from Dr. Bennett's activity, together with those afforded by the more matured experience of Drs. Alison and Christison. The clinical chair, by the existing arrangement, embodies three periods of the physician's life, each of them affording a peculiar advantage for clinical instruction; and, great as Dr. Bennett's merits are, they do not include all that his colleagues now supply. Again, it unfortunately happens that clinical professors, even endowed ones, become old like other men: and we are not entitled to sacrifice the future interests of the University to the present, even if it were proved that nothing could be more beneficial at this moment than Dr. Bennett's appointment.

As to Dr. Sharpey, he is well-known in Edinburgh, and would be, on many accounts, an acceptable addition to our medical and scientific circles; but it is quite possible that he may think, that to come to Edinburgh at so advanced a period of his career would be like making a new outset in life. If he feels any reluctance, Sir C. Bell's example is not likely to overcome the disinclination. But if the thing, as is alleged, be already settled, none of the parties can help themselves. And if many of us complain that we are made merely puppets under some unseen powerful hand which draws the wires, we must content ourselves with saying, in language congenial to the atmosphere of Edinburgh, that the autocrat, whoever he is, must be but a tool, after all, in the hands of Providence.

IRELAND.

THE MEDICAL CHARITIES BILL.

A general panic has seized the dispensary attendants in the rural parts of Ireland, at the proposed abandonment of this Bill by the Government. The County Infirmary surgeons had a full and very unanimous meeting last week on the subject, and communicated with the Council of the College, and afterwards with Sir William Somerville and Lord Clarendon. His Excellency received the Deputation with his usual kindness, and was as mysterious as could be expected, Sir William Somerville, on the other hand, very properly alluded to the opposition given last session to the measure in the House of Lords, as referred to at the period in the *Medical Times*, condemning, in no equivocal terms, the factions meddling with what had cost him so much trouble and time, his chief aim being to make the measure acceptable, not only to the sick poor but to the Profession. The interest taken in the measure by the *Medical Times* in England was alluded to by the deputation, and it is hoped its influence will still be used to induce the Government to alter their intention. On it the very existence of the Profession in Ireland at present hangs.

LECTURES ON MILITARY SURGERY

are something new in Dublin. Mr. Tuffnell, at the City of Dublin Hospital, has just commenced a course on this important subject—a matter for some time very much to be desired by pupils intending to get into the army.

ETHNOLOGICAL LECTURES.

In the Galway College, one of the professors has been delivering a set of lectures on the origin of the Celtic race; a question, it need scarcely be said, of deepest interest, as well remarked by the lecturer; the Celtic tongue has overspread Europe, and in it we must search for the "organic remains" that denote the revolutions that have changed the face of that extensive territory. These are best found along the western shores of Ireland. The Irish is the best language to study the history of the Celt—older than Welch, Armoric Erse, or Scotch. One of the most important results of recent philology the lecturer proved to be the referring all languages to a single parent stock,—the Celt, of course, the earliest branch from this widely-spreading eastern tree.

GENERAL CORRESPONDENCE.

OVARIOTOMY.

[To the Editor of the Medical Times.]

SIR,—As the question whether ovariotomy is to be retained amongst the recognised surgical operations or not will be discussed in your journal, may I be allowed to suggest to your numerous correspondents that they might materially contribute to determine this question by furnishing data which are required for the purpose.

According to the statistical records at present before the Profession, the proportion of deaths to the recoveries after the operation of ovariotomy is as 1 to 3. After severe surgical operations, the same proportion of deaths takes place, viz., one in every three operations. Hence ovariotomy is not more dangerous as an operation than the amputation of a leg or an arm; but the chief question remains to be answered, Is the necessity requiring the operation as urgent in the one case as in the other? To answer this more data are required than we at present possess upon the following points:—

(*a*) The duration of non-malignant ovarian disease when not interfered with, from the time of being first noticed to the death of the individual.

(*b*) The state of health enjoyed by the patient.

(*c*) In cases of a fatal termination, the cause of death, whether this was produced by the ovarian disease or by some accidental complication, as phthisis, pneumonia, &c.

I would also suggest to those gentlemen who have been in the habit of operating, that they would add valuable information to their other statistics, if they would state:—

(*a*) The number of cases in which they have been consulted and declined operating.

(*b*) The state of health enjoyed by the patient after the successful removal of a diseased ovary.

(*c*) The cause of death in fatal cases after an operation. The report of the cases need not occupy much space as examples:—

Miss A., aged 23, first perceived an enlargement of the right side of the abdomen two-and-a-half years before her death, which was caused by phthisis pulmonalis. The swelling rapidly increased in size during that period, and was twice tapped to relieve the extreme distension.

Mrs. E., aged 45, has had one child. Four years ago perceived a lump at the left side of the abdomen, which is quite moveable, and distinctly consists of a group of small ovarian cysts. Is most active in her habits, and in perfect health. Experiences a little pain in the side when she walks too far, but this passes away after lying down for a short time.

I am, Sir, &c., M.D.

ON THE IRREGULARITY OF THE VACCINE PUSTULE.

[To the Editor of the Medical Times.]

SIR,—As the attention of the Profession has been drawn to the fact of the irregularity in the maturation of the vaccine virus, I am induced to forward the following cases, which have occurred in my practice within the last two months, and, should you consider them sufficiently interesting, I shall be obliged by your inserting them in your valuable periodical.

On the 10th September I vaccinated a child, aged 5 years, with lymph taken from a healthy infant the day previously, and in whom the pustule observed its regular period. At the end of the 8th

day there was no appearance of redness, nor even of the puncture. On the 10th day a slight areola was perceptible, and on the 12th the pustule was perfectly matured. From this child I vaccinated an infant of four months, and in this case the maturation did not take place until the 13th day. I remember, some three years since, vaccinating my own child, in whom the pustule was not fully developed until the 15th day. I am not able at present to assign any satisfactory reason for these irregularities, but I anticipate, by repeated and continued observation, to arrive at some probable cause for these somewhat anomalous effects.

I am, Sir, &c.,

GEORGE F. BRUTTON WILLING, M.R.C.S.E.

Hampstead.

[To the Editor of the Medical Times.]

SIR,—As so much has recently been said relative to the early and tardy appearance of the "vaccine vesicle," it may probably be troubling your readers too much to give the subjoined case of *late appearance* of the "vaccine vesicle" a place in the columns of your widely-circulated journal.

On the afternoon of Saturday, Oct. 5th, I vaccinated a fine healthy female infant, aged nine months, with some fresh lymph taken from a fine healthy child in the same town. On the 10th I called to inquire if it had taken; the punctures had quite healed, and not the slightest scar remained; and, as the baby was suffering from a little *malaise* in consequence of dentition, the mother requested that the second attempt at vaccination might be deferred until the ensuing spring.

On the 21st of October, sixteen days after my attempt at vaccination, my partner, Mr. Charles Dalgairus, was called in to attend the father of the child, and he was not a little surprised upon being informed that the arm appeared inclined to take. Such was indeed the fact; one of the punctures was much inflamed, with a disposition to vesicate; and, upon visiting the case to-day, the 25th, the vesicle is fully matured.

This being the longest interval I remember to have elapsed during vaccination, I have ventured to forward it to the *Medical Times*. I am Sir, &c., RUPERT PINCOTT.

Ongar, Essex.

PREPARATION OF CRANIA.

[To the Editor of the Medical Times.]

SIR,—If the enclosed notes on the preparation of crania in hot climates come within the scope of your useful and popular journal of medical science, and appear to you likely to convey information upon an interesting, but much neglected subject, they are much at your service, and that of our professional brethren engaged in the arduous labours of tropical practice. During a long residence in India, the pursuit of this somewhat nasty, but highly interesting branch of natural history became an engrossing hobby, increasing in activity with every fresh addition to my collection. A fixed position in the beautiful Straits of Malacca afforded uncommon facilities for procuring valuable specimens, from the orang-outang of Borneo, and the babirusa of the Celebes, to the carnivora and innumerable animals which occupy the vast and dense forests of the Malay Peninsula. The elephant and rhinoceros, the tiger, black leopard, and bear, with the various members of the monkey tribes, the Gibbon, or long-armed ape, both brown and black, the lemur volans and tardigradus, were among the most remarkable of these.

It is much to be regretted that so fine a field for collecting subjects in natural history as we possess in India should be so little cultivated. Few medical men pay any attention to the pursuit, and the only mode of preparation (?) which came within my knowledge, consisted in burying the head entire for two or three months; taking it up at the end of that time, but generally leaving many of the teeth behind, whilst the bones were deeply discoloured by the decomposition of the blood and soft parts.

Non-professional men, like African hunters, sometimes preserve the heads of wild animals, by cutting off the flesh, and drying the bones. To conclude. I shall greatly rejoice if the preparation of crania, reduced in these notes to a few simple rules, and rendered as easy as certain of success, should tend to excite the attention of my younger brethren in India and elsewhere.—I am, Sir, &c.,

B. C. HENDERSON,

A retired Surgeon from the establishment of Prince Wales' Island, 1828.

"NOTES ON THE PREPARATION OF CRANIA IN HOT CLIMATES, AND CHIEFLY APPLICABLE TO INDIA.

"The first rule to be attended to is the removal of all the soft parts from the head whilst fresh; the second is the employing a large body of cold water for macerating, in proportion to the size of the subject; the third is, the discharging of all the red particles of the blood, by changing the water daily for the first two or three days; and the fourth is, to avoid the use of hot water in washing the skull when the maceration is completed. A very convenient vessel may be made from a beer barrel, (of four to the ton,) the upper third being sawed off, and a hole being bored near the bottom for letting off the water, and stopped with a wooden plug. This vat should be so placed as to let the putrid water escape readily into some drain or outlet, so as to carry off the effluvium of the operation. As it is very important to preserve every tooth in an anatomical preparation, it will be found useful to detach the lower jaw from its articulation, and fix both cranium and jaw in the vat by pieces of wood, stone, or brick, so as to keep all the teeth upwards; and care should be taken to avoid loosing any during the process of washing after maceration is completed, and the places carefully noted of those that may chance to fall out. When the cranium is dried, the teeth which are loose or fallen out may be readily fastened with a little cotton and thick mucilage of gum arabic. A great deal of offensive matter may be removed by syringing the cells and canals of blood-vessels on taking the skull out of the macerating vat. Examples of the utility of this plan may be found in the long canals of the alligator's head, the cells of that of the elephant, and the complicated lace-like structure of the organ of smell in the otter. The cavities of the ears should also be well syringed.

"In the above vessel and manner, almost every cranium may easily be prepared; those with large horns, as the monstrous Malay buffalo and stags may be so placed in the vat as that the water may reach to their very roots. In the case of the elephant, specimens of considerable size may be thus prepared; but where full-grown ones were in hand the following plan was adopted with complete success:—

"The soft parts having been all dissected off, the head was placed in a shaded and swampy jungle on the grass. It was soon covered with the ova of flies, which became full-sized maggots in forty-eight hours; and those speedily removed all the remnants of the soft parts, leaving only fringes of tough interstitial membranes. The skull was then cleaned by copious affusion of cold water, and dried and sweetened in the shade.

"In making preparations of the human cranium, it is desirable to break down and remove the whole of the brain through the foramen magnum before beginning the maceration, both to diminish the intolerable fetor, and also to facilitate the discharge of all the blood by steeping, since upon this part of the process essentially depend the beauty and whiteness of the preparation.

"The cranium during maceration may be kept from contact with the filth at the bottom of the vat, by being placed upon some supporter."

OXFORD SANITARY REPORTS.

[To the Editor of the Medical Times.]

SIR,—Owing to some accident, your number for November 9 did not come before my notice till to-day, and I, therefore, lose no time in sending you a few words in reference to the letter on the subject of the Oxford Sanitary Reports, signed "Oxon."

As soon as I saw in your number for September 7, the article to which "Oxon" refers, I expressed to Mr. Allen my regret at the omission of his name, and my readiness to write to you at once on the subject; but, as he did not consider it of sufficient importance to require me to do so, I did not then think there was any occasion to trouble the public with the private concerns of two individuals; especially as, whenever the reports have been quoted or referred to in this place, Mr. Allen's name has always been associated with mine. As, however, "Oxon" says that the omission has been the subject of remark in this city, I am now inclined to think that I was wrong in my decision, and that it would have been better if I had written to you in the first instance.

"Oxon" is perfectly right in supposing that I place a high value on my coadjutor's assistance; of which I cannot give a stronger proof than by saying, that, if I had again to request the co-operation of a gentleman in preparing the Reports, I do not know any one to whom I should apply in preference to Mr. Allen.

I have only, in conclusion, to express my thanks to "Oxon" (who is entirely unknown to me) for directing my attention to the subject, and for the kind construction he put upon my silence as to the omission of Mr. Allen's name; but, at the same time, I hope that no mere personal "repugnance to a journal notoriety" would have prevented my doing an act of justice to that gentleman, if he had expressed the least wish for me to do so.

Lastly, if we were all equally ready, with your correspondent, to assign a charitable motive for the conduct of our brethren, I think both the harmony and the dignity of our Profession would be much increased.—I am, Sir, &c.,

THE EDITOR OF THE OXFORD SANITARY REPORTS.

Oxford.

THE COMMISSIONERS IN LUNACY.

[To the Editor of the Medical Times.]

SIR,—A few observations occasionally on the subject of that most important office, the Commissionership of Lunacy, may not be out of place in this age of good common sense and progressive reform. Few offices could have been more needed, or marked more an effort in the right direction than this institution of our free and enlightened country. To appreciate the contrast between the irresponsible condition of the former keepers of private lunatic asylums, and their present position of responsibility and subjection to control, requires only common sense and common observation. So much is this a truth, that any attempt to explain the merits of the case would but enfeeble its great reality, and would be equal to an attempt to prove the superiority of good government over anarchy.

My intention in addressing you, Sir, on the present occasion, is with the hope of furthering the usefulness of this body. I have been long acquainted with the working of insane asylums, I can duly appreciate the influence which is felt by all (even by the best disposed) by the sense, that the eye of authority may be upon them at any moment. The indolent, the selfish, and inattentive superintendent is roused to activity, and compelled to act humanely by the fear of the consequences of non-attention; while the painstaking, humane, and intelligent, feel the comfort of being at work with some hope of the approbation of their judges, and the sympathy of their fellow-labourers.

But, to make this Commission at all equal to its vocation, it ought to be very much increased in the number of its officers and the extent of its operations. A visit once in three months is, after all, a very poor inspection, particularly as six months intervene between the visits,—for the commissioners are bound to inspect each asylum only four times in the year; and, as no stated periods in the year are fixed upon for their visits, they may choose their own time, and make them follow one another rapidly or not, as they think best. And no doubt they think it the better plan to make their inspections as uncertain in point of date as possible, for this very uncertainty,—this consciousness that a visit may be impending on any day, is a main feature in the supervision.

But, in addition to the paucity of visits, I have to complain of the brief and rapid character of each one, as to my mind unsatisfactory both to the superintendent and the patient. Can more be said of the inspections, than that if a house is known to be respectable, and if, therefore, the prejudice is in its favour, it consists of the following kinds: each patient to be seen, each room to be glanced at, complaints to be listened to when made, and an inquiry to be instituted where anything happens to strike a commissioner as requiring investigation; and all this to be done in as short a time as possible. It may be said, that this seems to be a pretty good inspection. But now mark how unsatisfactory it is to the patient, and to the superintendent, if he be an upright, honest man, which, as far as my experience extends, is the case.

First, as regards the patient. The inspection taking place in the presence of the superintendent, some patients may naturally feel a fear of making complaints (probably a groundless fear) before one in whose power they may be placed; others may be too stupid to explain their greviances; others wanting in sufficient presence of mind to seize the momentary opportunity offered them; and, of course, not a few wholly unable to speak for themselves. Do not such possibilities—nay, probabilities—nay, real facts, as these require that the commissioner should be in a position to descry an evil for themselves? and how can they do this except they are intimate with the history and disposition of each patient? A true shepherd is not only a person to whom appeals may be made by those who have the power and the *tact* to make them, but also one who knows how to seek after and save those who are in need of his aid.

Secondly, as regards the conscientious superintendent. How satisfactory it would continually be to have a really competent judge; one who would put a right interpretation upon unfounded accusations, and who, from thorough knowledge of his subject, would take a comprehensive, and, at the same time, accurate view of the case. Paradoxical as it may seem, I believe that very frequently the more sensibility and kindness a superintendent shows to his insane charge, the more he is complained of. A patient knows, in this case, that complaints will injure his feelings; and this, unfortunately, is but too often the chief object of the patient's perverted mind. Thus, mediocrity of kindness and some degree of apathy of feeling gain more respect from the insane, and is followed by less complaint, than the attempt at better things. Paradoxical again as it may seem, I believe that an acute sensibility, and an eager wish to fulfil duties, is too often misinterpreted by the best-intentioned judges, *if their intimacy with the subject in hand is not great;* and thus an eager improvement in one department of a superintendent's work, by making other parts appear unequal and deficient, but too often results in the conclusion being forced home to his heart, that less fault would be found with an even mediocrity of the whole, than with the attempt at improvement, which must be partial at first. And thus, the only consolation and guide of a really conscientious superintendent is the answer of his own good conscience—sufficient, certainly, for all noble natures.

And, thirdly, I can well believe how much more satisfactory would the inspection be (were it more perfect) to those high-minded gentlemen, the commissioners, themselves. Conscientious men in authority must feel deeply such a matter. Though one may satisfy his conscience by saying, "the burthen is so great that nothing more than a kind word to each, attention when appealed to, and a hope for the best, can be expected;" though another, more scrupulous than his fellow, may be driven to make a fuss about trifles which are apparent, while, from his real want of information, he passes over greater evils, may attempt to give a regular Black-Monday flogging, in order to insure that sufficient castigation is given, and his authority sufficiently asserted, and, in consequence, may probably rather acquire the character of testiness than the respect he seeks and really deserves; though a third, with a happy diffidence about the powers of his own judgment, may leave the work to his more able fellow; whether the *bonhomme* of the gentleman, the inquisitorial subtlety of the lawyer, or the scientific knowledge of the doctor may be uppermost in their intentions, I believe thoroughly, that all must be keenly conscious of a deficiency. How different things would be to all concerned did the sense of the presence of a thoroughly competent judicial tribunal exist.

Now, how is this inspection to be improved; how is it to obtain that position of authority which only real sufficiency of knowledge can insure?

The answer, I imagine, is simply this, that it must be effected by increasing very much the number of visits and the length of each visit. Let the visit be once in three weeks instead of once in three months; let sometimes only a week intervene between the visits, sometimes a fortnight, sometimes a month, and, when the visits do occur, let them occupy a much longer space of time. For, granting that private asylums are necessary, let them be thoroughly inspected by men of talent and humanity, who have no interest at stake in the asylums but the good of the patients. But it will be said, this would require many more commissioners and much more expense. The first proposition I acknowledge, the second I do not so willingly agree to; and this point forms one object of this letter. To come to the point, there are six stipendiary metropolitan commissioners,—three lawyers, and three physicians; each receives from Government eighteen hundred per annum, including their travelling expenses. Now, I ask the following questions:—Does it require *eighteen hundred per annum* to insure respectability, talent, and humanity? Would not nine hundred or six hundred per annum insure the acquisition of these qualities? Nay, is there not such a thing as over-paying as well as under-paying? Will not very large premiums be sought by those who can obtain good posts through interest and high patronage, while smaller ones, being beneath their regard, would fall into the hands of equally honourable gentlemen, though they may not enjoy so much patronage, or be exposed so much to the good and evil consequences of high favour? I say not this in disparagement of the present holders of the offices, for I know them too well to say a word in their disparagement, and I willingly acknowledge that the holders of the patronage could not have evinced more unmistakably the wish and intention to have the best man than they did in the very last appointment made to the Commission. But why should not three times the number of Commissioners be had for the money, three times the work done, and three times the amount of control in the hands of the Chancellor? In one word, I think the Commission much too confined in numbers, and each member much overpaid. This is my private opinion, and will only bear the weight of an anonymous assertion; but I ask for this question to be placed again before our financial politicians, as they are the persons who must decide upon the premiums necessary to obtain efficient officers. And I would wish them to feel that there is a strong opinion abroad, that a reform might well be made in this branch of our executive. Their wishes for reform by no means

extend to any alteration of the emolument of the present holders of the office; far be it from me to desire to cheat any individual of the position his country has conferred upon him; but I would have the above considerations well weighed in any fresh appointments. However arrogant these reflections may appear to some, yet, should they obtain any consideration in your valuable journal, I am content to incur such opprobrium.—I am, Sir, &c.,

PLEBICOLA.

THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

SIR,—In a late number of your periodical, your correspondent Dr. Wilks taunts us with "crying out if any strong expressions are used against us," and with being silent "if any straightforward and cool refutation of our doctrine is brought before us." In illustration of a refutation of this character, he refers us to a few remarks of his own made in a former number of your journal, "the principal purport" of which, he informs us, was the following question:—"Will the homœopathic body, unitedly, give a definite logical meaning to their great principle, *similia similibus curantur?*" Now, although there may exist a diversity of opinion as to whether the asking of a question can ever constitute a refutation of any doctrine, (unless, indeed, the question be unanswerable, which this is not,) none will deny that it is sufficiently "cool" of Dr. Wilks to assume it to be so. However, to avoid the imputation of being unable to answer this question, I shall endeavour to do so, premising that, in order to comply in some degree with the strange request, that the answer should be by the "homœopathic body unitedly," I shall endeavour to reply to it as much as possible in the words of Hahnemann himself, whom "the homœopathic body, unitedly," acknowledge to be the best exponent of the homœopathic doctrine.

I may in the first place observe, that the words "*similia similibus curantur*" are a mere formula, adopted for the sake of briefly expressing the distinctive feature of our system, just as "*contraria contrariis curantur*" is supposed to stand for that of the Galenic system, but neither the one nor the other expression, *per se, explains* anything, but both answer the purpose for which they were intended, viz., to serve as the distinguishing mottoes of the practitioners of certain systems of medicine. Therefore, in seeking for an explanation of the homœopathic principle we need not curiously inquire as to "what noun-substantive agrees with these adjectives," for it is obvious that the neuter gender is used to denote something that the phrase itself leaves unexplained, just as the mathematician makes use of a letter to denote some unknown quantity. The homœopathic principle is explained in the following maxim of Hahnemann:—"*To effect a mild, rapid, certain, and permanent cure, choose, in every case of disease, a medicine which can itself produce an affection similar to that sought to be cured.*" The similarity, it will be observed, refers not to the producing agent, morbific or medicinal, but to the effect produced; for instance, belladonna: the medicine bears no resemblance that we know of to the *miasm* of scarlatina, but the *effects* of belladonna on the healthy system bear a striking resemblance to the *effects* of the miasm in question; chamomilla bears no resemblance to a fit of passion, but its *effects* on the human organism bear a great resemblance to some of the *effects* of that emotion. Now, our object being to find for the disease a medicinal substance capable of causing in the healthy body an affection *similar* to the disease, your correspondent may not think his question answered unless it is stated what we mean by *similar*. Hahnemann leaves no dubiety on this point in his writings, as Dr. Wilks would find, if he were to decorate his shelves with the works of that philosopher, in place of "all those false homœopathic works" with which they seem at present to be encumbered. In the mean time, however, I may repeat shortly what will be found *in extenso* in Hahnemann. By *similarity* we do not mean *identity;* thus, we should not expose a patient labouring under small-pox to what would produce the *same* effect on a healthy individual, viz., the atmosphere of a small-pox hospital, but we should give him a medicine capable of producing a *similar* affection,—the more similar the better,—and, if we possess no one medicine capable of producing a *very* similar affection, we should probably find that the symptoms of the case would be nearly covered by the known effects of two medicines, and these two we should give successively or alternately, according to circumstances. The *similarity* we seek for is not the mere resemblance of *one* symptom of the medicinal disease to *one* of the natural disease, as, for example, the sleepiness caused by opium to the sleepiness attending any disease (though this was the way in which Andral conducted his boasted homœopathic experiments that have been so often denominated a complete refutation of homœopathy); on the contrary, we endeavour to find a remedy whose effects on the healthy correspond to the *whole morbid state* of the case we have to treat; and just in proportion as our remedy is thus *similar* will be the rapidity and certainty with which the disease is cured.

The other questions of Dr. Wilks, and the letter of Mr. Barrett, bear upon the subject of infinitesimal doses — a subject on which I must not enter, as you have put your veto upon it in your editorial remarks on Mr. Wilson's letter; but as your correspondent, Mr. Barrett, seems to be of a calculating turn of mind, I would beg to propose to him a few simple sums, which he may calculate at his leisure, with or without the aid of Herr Dase or Mr. Babbage's machine. Calculate the quantity of matter you leave on the ground in a five-mile walk which shall reveal your track to your sagacious dog; the weight of the musk conveyed in an odorous billet that shall make a sensitive lady faint; the quantity of ipecacuanha that escapes from an uncorked bottle that shall give some idiosyncratic individual a fit of asthma; the weight of the odour from a rose that was wont to make an eminent cardinal swoon; the cubic contents of a fit of anger that shall give your irascible neighbour the jaundice; the superficial extent of the sad intelligence informing the expectant wife that she is a widow, and strikes her dead upon the spot; the weight of the flash of lightning that shatters the oak and kills half a dozen stout men at its foot, and how many times an ounce of that subtle agent would reach from the earth to the dog-star and back again; the quantity in avoirdupois measure of the miasm of the pest that decimates a continent. After having completed these calculations, I would then beg him to calculate the infinitesimal quantity of courtesy in his letter, which accuses a large number of his professional brethren of dishonesty, and asserts that the best place for them will be Bedlam or St. Luke's.

I am, Sir, &c.,

R. E. DUDGEON, M.D.

82, Gloucester-place, Portman-square.

[We admit this communication to our pages under protest Cannot those people say what they have got to say within a reasonable compass? Why do they, even in writing, practise their dilution and attenuation? Do they imagine, as the old lady in the play, that they hide their hideousness when they shake puff powder over the mirror? Here is more than a column devoted to answering a question, which might, if a straightforward answer could be given, receive it in a dozen lines. And yet, in all this, we have the question jesuitically shirked, for we can discover nothing but that similar means like, and like means similar, "the more similar the better," provided "it is not identical." Hahnemann himself is rather more explicit on the point. He says the homœopathic system is that "in which there is employed for the totality of the symptoms of the natural disease, a medicine capable of producing the most similar symptoms *possible* in the healthy individual." An explicit answer even of this kind would be far more satisfactory to Dr. Wilks than that which he can receive from our present correspondent's letter; but for this gentleman it would evidently be too explicit and suggestive; for another question would naturally then arise,—Can these closely resembling symptoms be produced, and how? Let us refer again to Hahnemann; he, perhaps, may illustrate even this:—"In a case, he says, of sudden derangement of the stomach, with constant disgusting eructations with the taste of the undigested food, ... the ordinary physician attacks the degenerated contents of the stomach by an emetic." But, adds the writer,—we quote from Dr. Dudgeon's translation, "if the patient, instead of taking such violent and always hurtful evacuant drugs, smell only a single time at a globule the size of a mustard-seed, moistened with a high dilution of pulsatilla juice, the derangement of his health in general, and of his stomach in particular, will certainly be removed." We ask you, Dr. Dudgeon, in all courtesy, do you believe this balderdash?—and, if you do, can you explain it on the principle set forth in your own or your model's writings? But that is not impossible, where the properties of "chamomilla" are stated to be so extraordinary, ay, even to the extent of producing—the humble chamomile!—"catalepsy, with facies hippocratica;" epileptic convulsions, preceded by colic, and followed by sopor; "intermittent fever," "asthma," "convulsions;" "ulceration of the nose, the lips, and gums;" "erysipelas of the face," and a host of other serious maladies, including

"diarrhœa and constipation." If *similia similibus curantur*, what disease can stand before chamomile!!

Dr. Dudgeon is somewhat of a wag, but not a wise one. We spoke a short time ago of "vague analogies;" and in this writer's attempt at wit he has supplied us with something more vague than we had even dreamed of when, in seeking to escape from the absurdity of the infinitesimal doses, he suggests the measurement of the lightning's flash, or the effect of mental emotion resulting from the contents of a letter. We thank the writer for this latter analogy. His globules for the cure of disease, no doubt, contain the same quantity of material element that the contents of the letter conveyed to the heart-stricken widow.

Dr. Dudgeon trespasses on our feelings when he claims the rank of "professional brother." His proceedings, and that of his associates, have long since brought the connexion to an end. Still, though not in brotherly, at least in a friendly feeling, we shall give a hint to the class to which Dr. Dudgeon belongs. It has lately become the fashion, and evidently with advantage, to consider another class of idiotic, fanatic, notoriety-hunters as likely to be more benefited by a residence elsewhere than "in Bedlam or St. Luke's." These are places for madmen and fools; but folly, when systematic, is apt to be regarded as something more, and requires to be treated accordingly.—Ed. *Med. Times.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

R. B. Todd, M.D., F.R.S., Treasurer, in the Chair.

A CASE OF SOFTENING OF THE SPINAL MARROW IN A BOY AFFECTED WITH CHOREA.

By ROBERT NAIRNE, M.D.,
Physician to St. George's Hospital.

A boy, aged 17, was admitted into St. George's Hospital on the 27th of June last, with symptoms of acute rheumatism, and presenting, at the same time, well-marked symptoms of chorea. A mitral systolic murmur could be heard. The boy had suffered from previous attacks of rheumatism since the age of 12, but his friends had never seen him "in this way" before. The last attack of rheumatism was about Christmas, 1849. During five weeks before he came to the hospital convulsive motion of the hands had been observed; during the last two weeks he had stuttered much, and frequently contorted his mouth. Five days before admission he had been to market in a cart; he complained much of the jolting, and the next day was unable to leave his bed. He did not attempt to walk afterwards, and was said to have had a fit on the morning of the 24th. He was somewhat relieved by the treatment employed during the first day or two; he then became worse, more restless, delirious, more feeble, and violently convulsed. For two days he passsd his motions under him. Some hours before his death the convulsive movements ceased, and he became comatose. The body was examined twelve hours after death. There was congestion of the veins of the spinal canal and of the veins and sinuses within the cranium. About an inch of the *entire thickness* of the spinal cord, opposite the third and fourth dorsal vertebræ, was *white, softened, and almost diffluent*, the rest of the cord being in its natural state. The brain was of firm consistence, and injected with blood. The pericardium adherent; the mitral valve fringed with small vegetations. The lungs congested. The author remarks upon the points of interest of the case:—Chorea associated with acute rheumatism, and palsy of the lower extremities, depending upon softening of the spinal marrow. He refers to four cases on record, where softening of the spinal marrow existed in persons who had been affected with chorea. He does not consider there is any reason for supposing that in these cases the softening of the spinal marrow was the cause of the chorea. His observation of this disease would deter him from connecting it with disease of the brain or spinal cord. He believes a careful study of the phenomena of the disease during life to be the best means of gaining a more correct insight into its nature than we are possessed of at present. He refers to three other fatal cases of chorea which have been observed by him in the wards of St. George's Hospital: one occurred in his own practice, and the other two were patients of Dr. Macleod. He concludes by remarking, that the curious fact of the existence of sensation, and the transmission of nervous impressions to the palsied muscles of the lower extremities, although the spinal marrow had undergone the change of structure above described, shows that there is yet much for us to learn respecting its functions.

Dr. Webster regarded the case described by Dr. Nairne as one of interest, as it added another example of a disease with respect to the pathology of which we have yet much to learn. There is a great diversity of opinion as to the seat of the disease in chorea. Dr. Nairne had quoted some authors, but there were others to whom he had not alluded. In four cases mentioned by Serres the corpora quadrigemina and corpora striata were diseased. By Magendie and Bouillaud chorea was located in the cerebellum. A distinguished author, Dr. Copland, some thirty years ago published the particulars of a case of chorea, in which there existed most extensive disease of the spinal cord. Dr. Pritchard and M. Alebrandi both refer the disease to the spinal marrow, while his (Dr. Webster's) own experience led him to consider the medulla oblongata as its seat. He had had a great many cases of the disease formerly under his care in dispensary practice, but had had only one that had a fatal termination. In that instance, he regretted to say, there was not any *post-mortem* examination. It was singular, too, that the disease occurred in this instance in a boy; it is rarely met with in boys, the average having been, in his own practice, 16 girls to 5 boys; and, further, it seldom commences after puberty. Dr. Nairne's patient was 17 years old. It is a more fatal disease among girls than boys. Of 24 deaths registered throughout England and Wales, as occurring from chorea, there were 20 females, and only 4 males. Dr. Nairne had not entered largely upon the treatment; the disease is often very troublesome and tedious to treat. Purgatives, of course, would first be given, afterwards tonics,—the particular one chosen for girls being steel, if there be any indications of irregular uterine action. In them the disease is generally connected more or less with the womb. Stimulant applications to the spine are decidedly serviceable.

Mr. Barlow had felt much interest in the details of Dr. Nairne's case, as it showed that a disease may so well simulate chorea, as to be mistaken for it, in spite of the utmost care. There have been cases of so-called fatal chorea, but he was of opinion, that, when symptoms resembling chorea ended fatally, and disease of the spinal marrow was found after death, the case should be regarded as an instance of organic spinal disease, and not as one of a disease generally so curable as true chorea. Chorea is often most complicated. There are met with changes in the blood, disorder of the spinal marrow, waywardness of the will, and irregularity of the passions. The motions were peculiar to the disease, and did not resemble those of any other. It differs also from many convulsive diseases in that the movements do not occur during sleep. Dr. Webster's statement as to the mortality attendant on chorea had surprised him. It would be very important to know the history of these fatal cases. He thought all such cases, where the symptoms and movements simulated chorea, should be put on record, but he doubted the propriety of calling them by that name.

Dr. Webster, in reply stated, that, in his own practice, he had had 21 cases; of these, 16 were girls, and 5 boys. One only of these died. Of the 24 deaths that had occurred in one year, that is to say, 20 girls and 4 boys, he had no cognizance, save from the Reports of the Registrar-General. He knew nothing, consequently, of the history of these cases.

Mr. Barlow would not rely on statistics in this instance, as they were based on cases only supposed to be chorea.

Dr. Sibson observed that the fatal termination of Dr. Nairne's case, and the existence of softening of the spinal cord, did not preclude its being a case of chorea. He had seen 84 cases of chorea while he was at the Nottingham Hospital, five of which died from exhaustion. The worst cases of the disease only were admitted. Chorea, like apoplexy, is rather a series of symptoms induced by various morbid causes, than a disease itself. The irregularly alternate and involuntary movements of chorea, increased by emotion, resemble the movements which often occur in a paralysed limb under the same influence. They are also allied to those movements spoken of by Sir B. C. Brodie as occurring in a dog after the head has been cut off, during artificial respiration. The control of the brain over the reflex movements was gone, whilst the circulation induced the movements, and, in the same way in chorea, emotion excites the

peculiar movements, the control of the brain the while being diminished. The cause of this may be found in various morbid states of the system.

Dr. Todd inquired if any of the fellows had experimented with chloroform in this disease. Its inhalation seems to have been influential in checking other convulsive diseases.

Dr. Snow had used it on a patient of Dr. Chowne's, with relief at the time, but he did not know whether the patient ultimately benefited by it or not.

Dr. Sibson stated that it had been employed at the Nottingham Hospital in one instance; but, as it appeared to aggravate the symptoms, the inhalation was not repeated.

Mr. Streeter could not allow the discussion to terminate without alluding to the diagnosis. He thought that there was something more than chorea in Dr. Nairne's case, and that that probably was the spinal arachnitis or myelitis of Ollivier. The neurilemma of the fibrillæ of the cord had been in all probability the seat of chronic disease, and the choraic symptoms arose afterwards from the extension of irritation above and below it. The existence of this disease is rapidly fatal to the nervous structure, and, unless it be immediately diagnosed from rheumatism or common nervous irritation, the patient may be a cripple for life. He had seen such a case several years since in a lad, who complained of unusual movements and slight numbness of the fingers. Pressure on the spine between the shoulders caused severe pain, and the symptoms before night were much aggravated, the true nature of the attack being thus developed. The treatment was very active; bleeding from the arm, leeches, purgatives, mercury to ptyalism, and blisters, were all had recourse to, the result being that the symptoms disappeared, but the complete restoration of his muscular powers did not occur until after two years' residence in the country, and abstinence from active exertion. If the disease had not been readily diagnosed, or if the treatment had been less active, his patient would have been crippled for life. He (Mr. Streeter) believed that Dr. Nairne's case was similar to that he had just narrated, the disease being more chronic, and complicated with other more obvious forms of functional irritation, by which the more dangerous local disease of the spinal cord had been masked.

Dr. Nairne might perhaps have regarded the case as one of myelitis or spinal arachnitis, but for the attendant articular rheumatism. The ankles and knees were red, painful, and inflamed, the disease shifting from joint to joint, and the endocardium also being implicated. The lad, in fact, had the rheumatic diathesis, and this, he thought, strongly supported the view he had taken. Mr. Barlow did not consider the movements to be genuine chorea, but he (Dr. Nairne) thought they were as truly choraic as in any case that had come under his notice. The tongue was put out in a manner peculiar to chorea, and which is not seen in any other convulsive disease. The cases of disease of the spinal marrow he had met with did not present movements resembling those of chorea. The experience of other practitioners might, however, prove otherwise.

Dr. Mervyn Crawford agreed with Dr. Nairne in his diagnosis, because of the existence of the articular rheumatism, which he thought was not a complication of spinal disease. Chorea was a disorder of function; he had not met with cases of the disease in males so old as Dr. Nairne's patient, but in females he had had several 17 years old, and three or four 24 years of age. If there be spinal congestion, steel will be inappropriate; the great success, however, which attends the use of purgatives followed by steel, would tend to show, that congestion is an unfrequent complication. At the Middlesex Hospital he had had a remarkable case of chorea, in a man 65 years of age; it defied all remedies, and the man left the hospital without having derived any benefit from his sojourn in it. The disease had continued eighteen months, and presented all the symptoms of chorea. Every remedy was tried, both in the Salisbury Infirmary and at the Middlesex Hospital, but without effect. All the organs of the body had been carefully explored, but no disease could be detected. He suspected, however, that there existed latent organic mischief in the cord. He had never seen a case which terminated fatally, and thought that such must be of rare occurrence. It would be useful to discover the cause of death in all such instances. With regard to treatment, he gave purgatives and tonics; zinc at first, which would sometimes effect a cure; and then, if that failed, chalybeates and the shower-bath. Liq. arsenicalis must be employed, if all other remedies are without success. In young women, chorea is generally connected with disordered uterine action.

Dr. Webster remarked, that when cases of chorea occurred in old age, the patients were generally females. He had heard of one who was 80 years of age, and another between 50 and 60. The oldest patient he had had with chorea was a young woman between 18 and 19 years of age. It has been said that the disease is hereditary; this he (Dr. Webster) had not been able to discover; but he might remark, that two of the patients he had alluded to were brother and sister. He thought the children of the middle and upper classes were more free from the disease than those who live in dirty, close, unhealthy neighbourhoods.

Dr. Todd inquired of Dr. Crawford whether paralysis agitans might not be the disease from which the patient alluded to by him suffered. The symptoms are somewhat similar in the two diseases, except that in chorea control increases the peculiar movements, and in paralysis agitans it stays them.

Dr. Crawford said that the case was one of very violent chorea, and in no way resembled paralysis agitans. The movements could not be controlled. The man was advanced in life, but not old, and had always enjoyed good health.

Dr. Seth Thompson spoke of tartarised antimony in the treatment of chorea. He had used it in the case of a married woman, in whom the jactitations were very violent, and who was passing into a state of coma, with the happiest effect. The disease was assuredly chorea, and had been induced by a miscarriage.

Dr. Nairne had given tartar-emetic in the first instance to his patient, but, finding the fever increasing, he had recourse to calomel, as the chorea had supervened on rheumatism. His object in drawing up the paper was to draw attention to the pathology of the disease, and the physiology of the nervous system, and not to the treatment.

Dr. Black alluded to the vulgar opinion, that fear is the cause of chorea, and observed, that in that case no organic disease would be associated with it. He believed there was some truth in the remark that it was hereditary.

Mr. Tatum wished to observe, with respect to the state of the spinal chord, and the points of physiology connected therewith in its state of disease, that, while a certain portion of that chord was diffluent, and without apparent cohesion or organisation, the spasmodic movements of the muscles peculiar to chorea, modified as they were under the influence of mental emotion, were performed equally by the lower as well as the upper extremities,—thus apparently proving that the nervous communication between the brain and the apparently isolated portion of the spinal chord was not interrupted. How could this be accounted for? Was the nervous influence transmitted by any other channel, or was the diffluent portion of the chord capable of transmitting the nervous power? Was it more coherent than it appeared to be? or was it not necessary for it to be coherent, in order that its functions may be duly performed? Cases have been met with in which many of the nervous functions have been performed, although the spinal chord has been apparently disorganised. He was anxious to hear some observations on this interesting point, especially as there were those present who had particularly studied the nervous system.

Mr. Charles Hawkins, with reference to the question of the hereditary character of the disease, stated, that he knew of seven brothers, all of whom were paralytic.

Dr. Ogier Ward was attending an old man with paralysis agitans, in whom mechanical means could not arrest the movements, but served only to increase them.

Mr. Athol Johnson was desirous to learn whether the destruction of the chord involved the grey as well as the white matter. If so, he could not understand how the influence of emotion was transmitted through it.

Dr. Nairne, in answer, stated that the entire thickness of the chord was destroyed, the centre being quite fluid. He had never seen so much destruction of the spinal marrow, even in cases of paraplegia.

Dr. Todd thought, that, as the influence of emotion was perceptible on the lower limbs, the spinal chord could not be entirely destroyed. The diffluent condition of the spinal marrow might depend on *post-mortem* changes, or have occurred just before death; but, if not, it was not certain that the connexion must be altered or interrupted. Had the

parts been examined under the microscope, and nerve-tubes, &c., been found, it would have afforded *primâ facie* evidence that the connexion was uninterrupted.

Mr. Tatum remarked, that, if so much stress were laid on the alterations that might occur after death, no reliance could ever be placed on the revelations of the scalpel, as, if one, then all the organs might in a more or less degree show the changes thus induced, and, in that case, morbid anatomy would become a useless appendage to our studies.

Dr. Marshall Hall could not admit that a severed condition of the spinal cord was compatible with movements of the lower limbs, influenced by the will. Those caused by reflex action, or direct irritation, might occur if a portion of the chord were sound, but here they were said to have been under the influence of the will. Properly conducted experiments are not subject to the doubts that must arise from the mere evidence of disease, because the changes that may occur in dying cannot be duly appreciated, nor the degree of disorganization which is to be added to that which is caused in opening the spine. To the latter point he had long directed his attention, and he now used a curved cutting blade, acting as a lever upon a fulcrum laid across the spine. Dr. Nairne's case seems to have been one of rheumatic endocarditis and choraic movements; but it is not certain whether these diseases were co-existent, or were cause and effect, or even whether the so-called choraic movements were really chorea or not. In paralysis agitans the movements are not influenced by volition, although they are by emotion. They are not perceptible during sleep, unless set in action by disturbing dreams.

MEDICAL SOCIETY OF LONDON.

Dr. J. R. Bennett, President, in the Chair.

THE ARTIFICIAL OVIDUCT.

Mr. J. B. Brown exhibited a morbid preparation taken from one of the patients on whom he performed his operation for artificial oviduct in the treatment of ovarian dropsy, as lately detailed by him before the Society. The case was that of Mrs. L., who lived between four and five months after the operation, and died of paralysis and disease of the brain. This preparation showed that perfect adhesions had been established between the multilocular cysts and the abdominal parietes; the largest cysts having been extruded *en masse* in a decomposed state six weeks before death. The fistulous opening then was only large enough to allow the introduction of a probe. The cyst into which this opened was undergoing the necessary process for destruction, and it was evident that, had she lived, the breaking down of three other small ones would have been accomplished. In this specimen the uterus was healthy, and the other ovary free from disease. Mr. Brown remarked, that it clearly showed the practicability of accomplishing the formation of an artificial oviduct in similar cases of ovarian dropsy; but that the best mode of performing the operation remained to be tested by experience. He was of opinion, that in future cases he should make a much smaller incision at first, and probably apply a piece of sponge over the opening during the escape of the fluid in the after-treatment, in order to prevent the admission of air. He also remarked, that he was glad to be able to add most valuable testimony in favour of the *principle* of the operation. Since he read his paper he had heard from Dr. Fergusson that the operation had been performed several times in Paris with success, but that adhesion of the sac to the abdominal parietes was effected by *pinning* the cyst to the walls of the abdomen some days before making the opening. He had also heard from Mr. A. Ure of a case *successfully* treated by the *lateral incision* in Germany, and in this week's number of the *Provincial Journal* a case was recorded of an "ovarian tumour cured by incision, followed by suppuration," by Dr. Prince of St. Louis, Missouri. It was taken from the *American Journal of Medical Science*. Mr. Brown hoped, therefore, that now the principle of the operation was so extensively acknowledged, not only in this country, but in France, Germany, and America, the surgeons of this Society especially, and of England in general, would seriously inquire into it, and report their experience to the Profession.

It was resolved, on the motion of Dr. Routh, that the Council of the Society be requested to direct the attention of the Committee on midwifery and the diseases of women and children, to the question of the operative treatment of ovarian disease, and report thereon to the Society.

MEDICAL INHALERS.(a)

Dr. Snow placed on the table three kinds of inhalers which, he said, had been in use between one and two years, for the inhalation of various substances, at the Hospital for Consumption at Brompton. One inhaler consisted of a metal chamber, with a bottom of talc, on which was placed a small earthenware capsule, containing the medicine to be inhaled. A spirit lamp was placed underneath, and the patient inhaled the fumes largely mixed with air, by means of a flexible tube and a face-piece provided with valves. The extracts of opium, stramonium, and other narcotics, were inhaled in this way, the volatile products being gradually driven off, and only a cinder left behind. Gum resins were also inhaled in the same manner. By employing a rather large porcelain dish, various substances, as iodine, creosote, camphor, and benzoic acid, were inhaled, together with the vapour of water. Half an ounce of water would yield as much vapour as could be conveniently inhaled in half an hour; and, by employing but a small quantity, the medicine was in a saturated solution which yielded more vapour. Iodine was more volatile than the water with which it was mixed, and was, therefore, all inhaled before the water was consumed. The other substances were less volatile, and a portion was left behind, but need not, on that account, be wasted, but should be saved towards the next inhalation. Mercury and its salts required a higher temperature than the narcotic extracts to render them volatile, and, therefore, the capsule containing them was exposed to the flame of the spirit-lamp, without the intervention of the talc. Crude mercury, as well as its sulphurets and chlorides could be inhaled in this way. Another inhaler consisted of the face-piece mentioned above, and a short curved tube of metal lined with bibulous paper. It was contrived for the inhalation of chloroform in medical cases, but was adapted also for other substances not requiring the aid of heat, as hydrocyanic acid, conia, (the volatile alkaloid of hemlock,) and creosote, when inhaled without the vapour of water. A third form of inhaler consisted of a Woulfe's bottle, with wide apertures, provided with a flexible tube and face-piece. Iodine had been inhaled from it without the aid of heat, by wetting the interior of the bottle with a few drops of a saturated solution in spirit. Chlorine had been inhaled, also without heat, by introducing some choloride of lime into the bottle. If an opening were made in the inspiratory valve of the face-piece, a little of the expired air returned into the bottle, the carbonic acid of which acted on the lime and liberated the chlorine. This inhaler was also used without the addition of any medicine. By means of a face-piece, without valves, the patient was made to breathe more or less of the air twice over, and thus to respire an atmosphere containing rather more than the normal amount of nitrogen, in proportion to the oxygen, and also a greater amount of carbonic acid, except when a solution of caustic potash was put into the inhaler. This kind of dilution of the air was effected by Dr. Beddoes, at the Pneumatic Institution at Clifton, fifty years ago, at considerable trouble and expense, by means of large gas holders. There was not time to enter on the effects of the medicines. He might state, however, that the narcotics inhaled had generally relieved the cough. Opium had been inhaled by a considerable number of patients, and had, in very few cases, caused constipation. What the patient inhaled were new volatile products, arising from the decomposition of opium. Strictly speaking, morphia and opium could not be inhaled. The volatile products were chiefly given off about the temperature of 400°. The usual doses employed were two grains of watery extract of opium, four grains of extract of stramonium, one drop of conia, three to six drops of Scheele's hydrocyanic acid, and one grain of iodine. He (Dr. Snow) considered that whilst medicines taken into the stomach were generally entirely absorbed, only about one-half was absorbed when they were inhaled; for the portion of air which occupied the nostrils, trachea, and larynx, was returned without reaching the lungs. He said, that unless attention were paid to the physical properties of a medicine, it might be supposed to be inhaled when it was not. Patients had been said to inhale certain doses of hyoscyamus and conium when it could easily be shown that they got far less than the thousandth part of a grain. It was generally desirable also that the patient should inhale but one substance at a time. If mixed together they could not be inhaled in the proportions in which they were mixed, on account of the difference in their volatility.

CASE OF CAULIFLOWER EXCRESCENCE FROM THE OS UTERI.

WITH REMARKS ON THE PATHOLOGY AND TREATMENT OF THE DISEASE.

By JOHN ROSE CORMACK, M.D.

In September, 1847, Dr. Cormack was requested to attend Mrs.

(a) The inhalers are made by Matthews, Portugal-street.

G., who was in her second pregnancy. She stated that her general health was good; she had suffered from menorrhagia previously to her pregnancy, but this had been arrested, probably by gallic acid, prescribed in Edinburgh. She had a slight coloured discharge monthly during both her pregnancies. Up to the time of her confinement she made no complaint and took much exercise. When Dr. Cormack first saw her in labour, at 5 p.m. on the 28th Nov., she had discharged a great quantity of watery fluid. On making an examination, he found that abundant hæmorrhage was going on, which was fast lowering the vital powers of the patient. On introducing the hand, he found a firm and somewhat elastic mass obstructing the vagina; it was felt to be attached around the orifice of the uterus externally, and chiefly to the anterior lip; the os uteri just admitted the forefinger. A strong solution of alum was injected, a compress was introduced, and the vagina plugged. At 6 a.m. on the 29th Nov. the pains had become sharp and more regular; the tumour felt as a superficial roughness, with some more decided elevations. Nothing remarkable occurred for the next eleven hours, except a great drain from the seat of the disease of a dirty and faintly reddened fluid, which, when profuse, was arrested or moderated by alum injections and using the plug. At 7 p.m. the os uteri was considerably dilated; and at 8 p.m., as there was a sudden accession of hæmorrhage, Dr. Cormack punctured the membranes. A living child was born at 9; the placenta soon followed, and the uterus contracted naturally. The next morning the tumour had regained much of its original condition. The patient appeared to go on well till the 14th day. At that time, in consequence of local pain, Dr. Cormack examined the uterus, and found the tumour nearly in the same state as at the last examination. He now explained the nature of the case, and the probable necessity for operative interference, to which, however, the patient was reluctant to submit. Dr. Henry Bennett saw her in consultation on the 20th day; and, in consequence of pain at the base of the tumour and of alarming hæmorrhage on one or two occasions, excision was proposed, but was objected to by the patient. Mr. Fergusson, who saw her some time after, discountenanced operative interference, from the improbability of accomplishing a radical cure. During the first part of this time the discharge had been abated by the internal use of gallic acid, and pain had been restrained by opiates; but at last the sufferings of the patient became so great, that Mr. Fergusson, at her earnest entreaty, excised the whole of the diseased mass on the 6th of February, 1848, anæsthesia having been produced by chloroform. For a month the patient seemed to go on well; but she then began to complain of shooting pains in the back and pelvic region, and the incised surface was found to have become granular. In two months from the operation there was a fresh excrescence, varying in size, and from which a profuse watery discharge flowed at intervals. As time advanced, alarming hæmorrhage occurred every two or three days. The pain was constant and agonising. For several months before her death, she took daily from one to three ounces of the Edinburgh solution of hydrochlorate of morphia. Ulceration went on rapidly, and the patient died on the 17th July. During the last three weeks the attacks of hæmorrhage were so sudden and so violent as to render it necessary to keep the vagina almost constantly plugged.

Post-mortem Examination Forty-eight Hours after Death.—The cervix uteri was absent. The vaginal end of what remained of the uterus, as well as the upper portion of the vagina, was ulcerated. The incised surface of the uterus was hard and almost cartilaginous, and presented flabby granulations or vascular excrescences; these had also been observed on the portion removed. The body of the uterus was harder, and rather larger than natural; it was dark on its peritoneal surface. The urethra, bladder, ovaries, and rectum, were free from disease. Dr. Cormack thought that an operation at an earlier period might have been attended with a somewhat different result. Such tumours, although remaining stationary for some time, at last inevitably terminate fatally, a fact strongly in favour of early operative interference. The painless nature of cauliflower excrescence in the early stages is, however, likely to prevent the suspicion of existing disease. The experience of Dr. Simpson, as shown in some cases reported before the Medico-Chirurgical Society of Edinburgh in 1845, was also an encouragement to operate. The rationality of attempting a cure by operation was further supported by the researches of Dr. Andrew Anderson, of Glasgow, who had found that a regularly formed membrane was necessary for the growth of cauliflower excrescence. This membrane he believed capable of forming a cell-substance from the blood; and that the removal of this membrane, with the portion of the os uteri from which it grew, would hence be more probable to be successful. Dr. Cormack would unhesitatingly advise excision at an early stage; and even later would in many cases advise the same course, but merely as a palliative, and as affording a very forlorn hope of cure. If an operation be decided against, the proper treatment would be astringent anodyne injections and the internal use of gallic acid. The disease was probably hereditary; the mother of Dr. Cormack's patient having died of what was described to him as cancer of the womb.

Dr. Murphy commented on the absence of symptoms of disease in this case during pregnancy, the presence of the large tumour not being discovered until an examination was made on account of hæmorrhage. He thought it remarkable that the malignancy of the growth was arrested during the term of pregnancy, and that the child should be unaffected by it. The treatment of these cases formed an important point of consideration. He was opposed to any operation, for his experience, however limited it be, showed that the disease always returned sooner or later, although every apparent sign of disease had been extirpated. In one case the relapse took place in three weeks, in another in three months. Even an operation in the early stage is not advisable, for the disease is in the blood, and will assuredly be reproduced. He thought pressure, as advised by Dr. Walshe, and used in this case by Dr. Cormack, when plugging the vagina, if it did not cure, might at least arrest the progress of the carcinoma.

Dr. Henry Bennett remarked, that when he saw Dr. Cormack's patient, he did not look upon the disease as the cauliflower excrescence of Dr. Clarke, but as a polypoid or encephaloid mass. The first-named disease is vesicular, the latter encephaloid. The former disappears under the ligature, and every trace is lost. He himself did not approve of excision, as in the four cases he had seen the disease had relapsed, and the patients died. If, however, the disease were circumscribed, Dr. Simpson's cases might lead him to operate, the rather that, if nothing were done, death must follow. He had had many cases of uterine cancer, but, although he was in several the first medical man consulted, all were more or less advanced. He thought that authors had mistaken the primary symptoms of uterine cancer, and had described as such those that accompanied inflammation of the part.

Mr. Stillman described a case of fatal flooding, in which, after death, a large cauliflower excrescence was discovered. It had not been preceded by pain or the characteristic discharge. The patient was a woman of dissipated habits.

Mr. J. B. Brown was in favour of excision; and he thought, if in Dr. Cormack's case it had been performed earlier, it might have succeeded. The cases published by Dr. Simpson were of value, for they showed the operation had protracted life for several years. Had it been for months only, it would be advisable to do it, providing that the patient felt a comfort not previously possessed. The surgeon should endeavour to palliate when he cannot effect a cure. Pressure, he thought, would arrest the progress of cancer.

Mr. Hird did not think an operation justifiable in malignant disease, unless a remedy could be discovered to remove the constitutional taint. He was of opinion that, during the discussion, two diseases quite distinct had been alluded to—the cauliflower excrescence and carcinoma uteri. Dr. Murphy's cases were evidently cancer, and neither excision nor pressure could be curative. In constitutional or blood diseases, the arguments were as strong against pressure as against the knife. Still, however, it may be necessary sometimes to operate for the prolongation of life. He thought that surgery had suffered great discredit by unnecessary operations.

Mr. Chippendale was sorry that the disease had not been examined under the microscope, as that would have settled the question. He could not think, with Dr. Cormack, that the disease originated from a basement membrane, but thought it was of cell formation. If the former were the case, an operation might be successful, because all the membrane could be taken away, but in the latter it would not, as being a blood disease, it would certainly be reproduced.

Mr. Marshall mentioned the case of a female, 27 years old, confined of her second child. She had not had pain or discharge during pregnancy, but did not look healthy. On her decease a few weeks after delivery, a large colloid tumour was found. He had watched two cases of cancer uteri throughout their course. They presented the symptoms usually described by authors.

Dr. Cormack, in reply, thought that sufficient evidence had not yet been collected to decide as to the character of this disease, whether it be malignant or not, and, consequently, as to the treatment that should be pursued. When patients were enduring extreme suffering, and in danger of perishing from hæmorrhage, the operation might be employed.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. Quain exhibited a specimen of

FIBROUS AND FATTY DEGENERATION OF THE HEART,

with the following history:—

Lady H——, aged 58, on rising from bed, on the morning of Oct. 21st, went to the night-chair for the purpose of emptying her bladder, then laid herself down again, and died immediately.

The following are the principal facts in the clinical history of her case:—When about 30 years of age she went to India, where she remained fourteen years without any serious illness or inconvenience, and returned to this country some fifteen years ago. She enjoyed good health, save that she complained of bilious headache occasionally, until about seven years ago, when in her 51st year, the menstrual functions being still regularly performed, she had an apoplectic seizure one evening, after returning from a concert. This caused a confusion of intellect and a loss of speech, which lasted eight or nine days, but no general paralysis of sensation or motion. About eighteen months after she had a second, but less severe attack, followed by slight weakness of the right upper and lower extremities. Within a similar period she had a third attack; this more resembled the first. She was then in her 54th year, and the menstrual functions began to be irregularly performed. Each attack was treated on the usual antiphlogistic plan, including mercury, and it was remarked at the time that she bore bleeding badly. Soon after the first attack,—that is, about four years ago,—she began to complain of shortness of breathing on exertion. This, and the partial paralysis, interfered with her taking exercise, and she became stouter. She continued pretty well, however, until October, 1849, when she was one night seized with a most distressing attack of difficult breathing, which lasted about five hours, and was then relieved by ether and ammonia. She had no return of the distress, and did well, with the exception of an attack of common bronchitis in February last, until the commencement of September last, when, being at Tonbridge Wells, she had several attacks, at intervals of two or three nights, of the same difficulty of breathing. For three of these attacks she was rather freely bled. As she still continued very ill she came to town, and I saw her soon after, in consultation with Mr. J. C. Langmore. She was in bed, but suffering only from a sense of faintness or exhaustion, consequent on a distressing attack during the preceding night. These attacks generally came on about two o'clock in the morning, and were of a very alarming character. The extremities and face became cold and livid, the pulse extremely feeble and irregular, and the sense of impending suffocation most urgent. A severe pain in the region of the heart and across the chest came on as the sense of suffocation became less. The pulse was 68 and compressible,—it was generally about 60; she was free from giddiness, or noise in the ears; she slept well except when disturbed by the attacks, and was not subject to faintness; she complained of slight pain in the region of the liver; the motions were pale and lumpy. Mr. Langmore described the urine as being healthy. The heart's impulse was weak, but the dulness in this region was more extended than natural; the first sound was remarkably low and prolonged, the second clear, and heard over a considerable extent of the upper part of the chest. There was no murmur. Some slight sonorous ronchus was heard in the back. Considering the age, conformation, and sedentary habits of this lady, and also the character of the symptoms, for which in the physical signs no other explanation could be found, the conviction formed was, that the disease was fatty degeneration of the heart to a moderate extent; an opinion strengthened by the presence of an arcus senilis. The result justified the opinion; she died in about five weeks after my seeing her. The treatment consisted of mild mercurials, with taraxacum and aperients, alkalis with bitter tonics, and a few leeches to the region of the heart, to be followed by iron and antispasmodics, during the paroxysms, which produced very beneficial effects. The fits became much less frequent and severe for some time before her death.

Post-mortem.—The body and viscera generally were covered with much fat. The calvarium was firmly adherent and deeply marked inside by vessels. There was more serum than usual in the cavity of the arachnoid and ventricles. On slicing the brain the remains of the causes of the three apoplectic seizures were found; one a small spot, the size of a pea, situated in the fore part of the left hemisphere, towards the base, was composed of a transparent greyish substance, like cellular tissue, infiltrated with serum. In each corpus striatum, towards its upper part, was found an orange-coloured spot, about the size of a haricot bean, soft, and in the left having somewhat of a cystic appearance; the white fibres were here broken up and distorted; the arteries of the base were studded with atheromatous or fatty matter; the lungs healthy; the heart presented rather more fat than usual on the surface, and might weigh about 14 oz. The anterior branch of the left coronary artery was extremely ossified; the right auricle was dilated, thickened, and filled with dark blood; the right ventricle not dilated, but its walls thickened; the tissues of the walls of these cavities appeared healthy; the left auricle and ventricle were contracted and nearly empty; the wall of the left ventricle, at the thickest part, measured thirteen lines; the valves were healthy; the muscular substance of the septum towards the apex, and the wall of the left ventricle towards the anterior surface of the heart, presented the pale buff-colour of fatty degeneration, which passed into and contrasted with the healthy flesh-colour of other parts of the heart,—a species of ecchymosis, scarcely amounting to hæmorrhage, appeared in the diseased part of the wall of the left ventricle. Under the microscope the usual characters of fatty degeneration were found, but there existed also a large quantity of a fibrous texture, mixed with the fatty degeneration. The liver was enlarged, lobulated, hard, and moderately granular. Both kidneys rough and granular; one larger than usual, the other smaller. Dr. Quain referred to the importance and the possibility of recognising this disease during life, even when not very considerable in extent. The treatment which seemed to a certain extent to have controlled the disease in this case was referred to, and allusion made to the relation which existed between the ossification of the coronary artery and the portion of the heart affected, showing clearly that the degeneration was due to impaired nutrition.

MEDICAL NEWS.

Military Appointments.—3rd Dragoon Guards: Joseph Sawyers, M.D., to be assistant-surgeon, vice Richard Carmichael Bourne, who resigns. Provisional Battalion: Staff-Surgeon of the 2nd class Andrew Maclean, M.D., to be surgeon, vice John Freeborn Pink, deceased. Hospital Staff: Staff Assistant-Surgeon James M'Grigor Grant, to be staff-surgeon of the 2nd class, vice Maclean, appointed to the Provisional Battalion; Acting Assistant-Surgeon Wm. Briscoe, M.D., to be staff assistant-surgeon, vice Grant, promoted.

Naval Appointments.—Surgeon Joseph Caldwell (1842), recently paid off from the Mariner, 12 sloop, on her return from the East India station, is appointed surgeon-superintendent of the Lady Kennaway, hired convict-ship.

Obituary.—At St. Omer's, on the 26th ult., Maitland Maitland, M.D., in the 91st year of his age. On the 12th November, at Foulsham, Norfolk, James Saunders, Esq., surgeon, aged 67. At Trinidad, Sept. 26th, on board the barque Atlantic, James Guthrie, M.D., assistant colonial surgeon, and formerly assistant-physician to the Royal Edinburgh Asylum, aged 34.

Epidemiological Society.—The first meeting of this Society took place on Monday last, in the rooms of the Royal Medical and Chirurgical Society, lent for the occasion. The "whip" had been most extensively used; and, as might have been anticipated, a large but very motley group—such as the hall of the Medical and Chirurgical Society never before beheld, and, it is to be hoped, never will again—assembled to inaugurate the new Society. Gentlemen who advertise, we are advised, were there in some force; a member of a "Silent Friend" firm showed himself; and a practitioner with the following card or rather handbill, which we publish (though without the advantage of typographical display) as a curiosity, leaving out the name, lest we be charged advertisement duty, honoured the meeting:—

"Dr. *******, District Medical Officer **********, 17, Little **** street. At home until 10 in the forenoon, and 4 to 5 in the afternoon. Orders for visits ought, in general, be obtained early in the morning."

The accomplished President seemed anything but at home; and of the forty-four office-bearers, only seventeen gave him the support of their presence. Nevertheless, he delivered a most eloquent and able address, as all must be that proceeds from the pen of Dr. Babington. Dr. Bryson read the first portion of an excellent paper on the Infectious Nature of Cholera; and this we trust to publish at length in our pages. We wish the Society every success,—and a little more discretion.

THE COLLEGE FELLOWSHIP.—The examinations for the Fellowship of the Royal College of Surgeons commenced on Tuesday, and was continued until Thursday last. The following questions on anatomy and physiology were submitted to the candidates on the 3rd inst., viz.:—

1. What glands pour their secretions into the mouth? Describe the situation and connexions of the parotid.
2. Describe the elbow-joint, and the mechanism by which rotation and supination of the hand is performed.
3. Describe the position, course, and connexion of the intestinum rectum in the male, and mention the peculiarities of its structure.
4. Describe the course of the common iliac artery, its relative position to the parts around on the right and left side, the point of its bifurcation, the course and relative position of the external iliac.
5. Describe the distribution of the arteries supplying the abdominal portion of the organs of digestion.
6. Enumerate the parts occupying the upper opening of the thorax, and describe their relative situation.

The following questions in pathology and surgery were submitted to the candidates on the 5th inst., viz.:—

1. Describe the healing process, by adhesion, by granulation.
2. Describe the most frequent causes of suspended animation, their modes of action, and how death is to be averted.
3. Describe the evidences of the presence of a foreign body in the air-passages, the operation for its removal, and the difficulties and dangers which may attend it.
4. Describe the morbid changes which attend the formation and progress of a poplitcal aneurism, the operation for its cure by ligatures and by compression of the femoral artery: how do these two modes of treatment act in the cure of the disease, and what are their respective merits?
5. Describe the effects of rickets on the bones generally and specially; give the treatment of the disease.
6. Enumerate the diseases of the eye in which the morbid action originates in the conjunctiva.

THE COFFIN DRUGS.—An inquest has been recently held at Haggerstone, before Mr. Baker, the Coroner, on the body of Mr. Bedwell. The jury found a verdict, "That the deceased died a natural death, but that his death may have been accelerated by certain herbs improperly administered to him, and which, in the opinion of many medical gentlemen were opposed to the cure of the disease under which he was labouring; and they condemn the reckless and inconsiderate use of such materials, without a regular and proper attendance on the deceased." The Coroner said, "that the jury had taken a very merciful view of the case, which he would bear in mind, and in case any death in future occurred under similar circumstances, where it could be shown clearly to arise from an improper administration of a medicine, he should advise a verdict of manslaughter." The newspapers in different parts of the country have already recorded so many instances of death following the use of the deleterious drug recommended by Coffin, and exhibited most rashly and ignorantly by uneducated impostors, that it is quite time that Government should interfere. Quacks destroy more lives than actual warfare. Printers, journeymen shoemakers, bricklayers, labourers, &c., who purchase Coffin's quackeries and his pamphlet, fancy they have found a royal road to medicine, and practise accordingly.

HEALTH OF LONDON DURING THE WEEK.

THE sudden increase in the deaths last week has been followed by a more remarkable decreasc. The following numbers show the fluctuations in the returns during the four weeks of November:—921, 908, 1016, and in the week ending last Saturday, 861. The average of the ten weeks corresponding to last, in the years 1840-49, was 1067, which if corrected for increase of population, is 1164; the 861 deaths registered last week are therefore less than the corrected average by 303. It will be seen from a statement of the deaths in three periods of life, that the young, the middle-aged, and persons of advanced years, now participate in an improved state of health:—

	Last Week.	Average of Ten Corresponding Weeks (1840-49.)
From birth to 15 years .	410	503
15 years to 60 . .	289	344
60 and upwards .	162	218

But notwithstanding the great decrease in the present return as compared with that of the previous week, it appears that in the class of zymotic or epidemic diseases the number remains nearly the same. The aggregate of fatal cases by epidemics was in the preceding week 203, in the last 196; whereas in affections of the respiratory organs, the number, which rose to 201, has now fallen to 160. Consumption, which stands in the tubercular class, was 111, and in the following week declined to 96. Convulsions, which carried off in the previous week 44 children, was recorded last week as the cause of death to 35; and while 48 persons died of "age," only 24 cases this week are placed under this head. Between the 21st and 28th of November 8 pensioners died in the Royal Hospital at Greenwich, in most cases of paralysis or apoplexy. Last week the deaths from small-pox amounted to 14, all amongst children; and, though it is still below the average, the disease appears to be making progress in the metropolis.

MORTALITY TABLE.

Deaths in the week ending Saturday, Nov. 30, 1850.
(Metropolis.)

CAUSES OF DEATH.	Nov. 23. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	410	289	162	861	10665
SPECIFIED CAUSES	410	288	162	860	10613
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	153	29	14	196	2309
SPORADIC DISEASES:					
Dropsy, Cancer, and other Diseases of uncertain or variable seat	1	22	18	41	540
Tubercular Diseases	49	84	4	137	1731
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	46	40	30	116	1244
Diseases of the Heart and Blood-vessels	2	17	16	35	315
Diseases of the Lungs, and of the other Organs of Respiration	78	38	44	160	2245
Diseases of the Stomach, Liver, and other Organs of Digestion	24	21	4	49	542
Diseases of the Kidneys, &c.	2	4	1	7	97
Childbirth, Diseases of the Uterus, &c.	...	9	3	12	110
Rheumatism, Diseases of the Bones, Joints, &c.	5	6	1	12	79
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	10
Malformations	3	...	...	3	42
Premature Birth and Debility	25	2	...	27	179
Atrophy	14	...	...	14	154
Age	...	...	24	24	613
Sudden	2	1	...	3	149
Violence, Privation, Cold, and Intemperance	6	15	3	24	263
Causes not Specified	...	1	...	1	52

The Deaths in the several Districts are as follow:—

DISTRICTS.	Population in 1841.	Nov. 30, 1850.	Sum of Ten Weeks.
London	1948369	861	10665
West	301189	137	1485
North	376568	179	1930
Central	374199	138	1947
East	393067	189	2528
South	503346	218	2775

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	21	Heart	31	Phthisis	96
Bronchitis	64	Hooping-cough	33	Pneumonia	67
Cholera	0	Hydrocephalus	19	Scarlatina	32
Childbirth	7	Influenza	2	Small-pox	14
Convulsions	35	Liver	12	Stomach	2
Diarrhœa	13	Lungs	3	Teething	11
Dropsy	12	Measles	25	Typhus	47
Erysipelas	4	Paralysis	22	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	773	453	320
Females	709	408	301
Total	1482	861	621

METEOROLOGY OF THE WEEK.

Elec'tricity.*	Nov. 30, 10h. 45m. A.M. Positive electricity, with moderately strong tension was shown, and continued generally during the remainder of the day. This was the first exhibition of electricity for three weeks.								
Rain in Inches.	0·64	0·02	0·01	0·00	0·00	0·00	0·00	SUM	0·68
Amount of Horizontal Movement of the Air.	Miles. 420	195	40	85	105	40	35	SUM	920
General Direction of Wind.	P.M. S.W.	S.W.	S.	N.	N.E. & E.	E. & N.E.	Calm.		
	A.M. S.S.W.	S.W.	S.W. & S.	N.	N.	N.E.	N.E.		S.W. & N.E.
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 7·5	+ 3·2	— 2·3	— 4·8	— 7·5	— 7·9	— 9·7		— 3·1
Ditto, Dew Point.	47·2	40·1	39·3	35·8	33·5	28·4	29·9		36·3
Mean of Thermometer. Dry.	51·0	46·7	41·3	38·8	36·1	35·7	33·8		40·5
Mean of Barometer.	28·987	29·023	29·252	29·604	30·117	30·147	30·034		29·595
Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...		Means ...

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Communications are acknowledged from:—

Mr. Girdlestone, of John-street, Bedford-row; Mr. Charles Taylor, of Bethel-place, Camberwell; Dr. Butler Lane, of Ewell, Surrey; Mr. Livett, of Wells; Mr. Garlike, of Rickmansworth; Dr. King, of Saville-sow; Dr. John Taylor, of Huddersfield; Mr. McDougall, of Henrietta-street; Professor Guy, of King's College; Mr. Moore, House-Surgeon, Queen's Hospital, Birmingham; Mr. Travers, of Dover-street; Dr. Kidd, of Kingsland-crescent, Dr. D'Allex, of Brook-steeet; A Reformer of Abuses; C.D.; R., of the Edinburgh Infirmary: A Union Surgeon; A Medical Assistant; Thomas J.; Cui Bono; R. E. T; Mr. Hore, of Shoreham.

Professional Prizes.

[To the Editor of the Medical Times.]

Sir,—In your Journal of Saturday last is a bait, or, rather, there are baits somewhat tempting, and which I think it necessary and highly proper to debate, as I am not only hungry, but a little pugnacious, especially as the intellectual south-east wind is rather powerful and ungenial to the north men. In order to drive into port I see no better method than tacking about. In short, I wish to allude to what you have designated "Professional Prizes." No doubt many will be candidates, and no doubt nearly as many will be sorely disappointed, and they will learn, when it is too late, that their labour and trouble have been in vain.

I wish to know, if you please, if all the Societies and persons appointed to receive essays and papers are in the habit of acknowledging their receipt? And secondly, when an essay has been approved of, whether the unfortunate candidates are apprised of their misfortunes? And third, whether the unfortunate candidates receive back their bad and miserable productions?

There is, Sir, a want of honour in these things, and I should only like to see a little more kindness displayed. I have been an unsuccessful candidate more than six times, and I never should have once heard of, or seen my productions, if I had not looked pretty sharply after them; and this was no inconsiderable annoyance, as the subsequent trouble quite compensated for the previous pleasure I had had in composition, if such a thing is possible.

The following was once a bait:—"The Medical Society of London also offers for competition Two Silver Medals annually, one to be given to a Fellow, the other to an honorary or corresponding Member, or to any author not a member who may contribute a paper during the Session considered worthy of that distinction."

On a particular medical subject I had made a discovery. I wrote a paper containing theories, facts, and experiments. I was proud of my bantling, and I sent it up to the Medical Society. I have seen or heard nothing of my baby since, though it was born nearly two years ago; I am unable to say whether use has been made of it, or whether it is defunct. I would have thought that some gentleman would at least have taken the trouble to have written me word of some sort.

Until a change is made in this respect, I, at all events, shall undergo no further troubles or trials; and I hope that the unpractised and hopeful candidates in future will be careful not to allow any discovery or original experiment to fall out of their grasp without being persuaded that no advantage will be taken, and that they will lose nothing.

I am, Sir,
Yours respectfully,
December 1, 1850. A Reformer of Abuses.

If such conduct as that referred to by our Correspondent become a practice, the rewards to Prize Essays will be a premium to dulness rather than merit, as no man of original views and capable of advancing science will become a competitor at the risk of his Essay being neglected, and his views appropriated and worked up in another form. Is it not probable, that, in this instance, the Council of the Medical Society are not so gullty as they appear, and that the delay may be owing to the recent changes in the management of the Society.

Dietary at the Hahnemann Hospital.

[To the Editor of the Medical Times.]

Sir,—Your Correspondent has omitted to send you a formula in much vogue among the Homœopaths, when the soup described In your last disagrees with the stomachs of their pauper patients. It is called in the Hospital Pharmacopœia "Aqua Magica," and is much used in that arlstocratic establishment:—

Take a little rum—the less you take the better—
Mix it with the Lakes of Wever and of Wetter;
Take a spoonful out—mind you don't get groggy—
Then add it to the Lake Winnipisiogee.
Stir the mixture well, lest it prove inferior,
Then pour out half a drop into Lake Superior.
Every other day take a drop in water,
You'll get better soon—or, at least, you ought to!

I am, Sir, &c.,
An Occasional Visiter to the Hahnemann Hospital.

Royal Infirmary, Edinburgh.—We thank our Correspondent for the communication and his offer of reports; but, unless he gives us his name in confidence, we cannot allow such statements to appear in our columns. We have heard from various quarters that things are not "equally easy and safe" as some would lead us to suppose; but the expression, we presume, is stereotyped for the papers alluded to. The egotism of the gentleman is so familiarly known, that each successive display only raises another smile among those who read his ludicrous lucubrations. Our Correspondent should not distress himself so greatly. If a man is constantly blowing his own trumpet, it can hardly be otherwise than that a note should occasionally be out of tune. "Cooking accounts," to make things seem "easy," is a practice likely to meet its own peculiar reward.

A Union Surgeon.—The scheme suggested by our Correspondent has been brought under the notice of the Government, and we believe that the Poor-law Board are attempting to carry it out, though in a very imperfect and partial manner. Before any such plan can be successful, there must be an entire re-organisation of the Poor-law staff. The plan should be fully discussed in the journals, for the purpose of developing its advantages and discovering its weak points. If a "Union Surgeon" will enter more fully into the question we will gladly insert his communication.

A Medical Assistant.—Our Correspondent laments the condition of medical assistants, who, whilst out of a situation, are often in a state of great poverty, and asks "whether such a thing as a Provident Fund might not be established for their benefit?" We certainly think so, and believe that the Medical and Surgical Practitioners' Society, or any other, would be doing good service by making arrangements to carry out this laudable object. We fear, however, that the Relief Fund could not be satisfactorily worked, except by a Society that had it in its power to provide situations for assistants as soon as possible after application had been made for the benefits of the Fund, otherwise there would be no restraint on unworthy or idle claimants.

Thomas J.—Your claim is good. As regards the other matter do not interfere. You cannot touch an unclean thing without defilement.

Cui Bono?—The answer is obvious. Disinterestedness is a rare virtue, and the world is not so silly as to trust to it. Watch where the profits go.

R. E. T.—We have seen the circular referred to, and it clearly shows that a better spirit has come over the Councils of the Medical Protection Society. An attempt is now made to realise the measure of justice we originally proposed and declared to be inevitable. So far we approve of the Intentions of the President. If we rightly understand the terms of arrangement, our Correspondent will be simply required to make a demand for the amount of the money due to him, minus, of course, one guinea subscription, the precedent condition giving him the right to receive his own money. We refer our Correspondent to our article.

Mr. Charles Taylor's papers "On Infantile Remittent Fever," will appear so soon as our previous engagements will permit.

C. D.—We fear we cannot "minister to a mind diseased." If our Correspondent plucks "out the rooted sorrow" his restless nights will probably cease.

"Sorrowing days and restless nights,
Are often sin's dread perquisites."

Dr. Butler Lane's paper "On Blood Stains" is in type.

Mr. Hore, of Shoreham, will be so kind as to inform us if his letter is intended for publication.

Wardrop on the Heart.—Our subscribers may rest assured that we shall remit no effort to comply with their request,—the completion of the work depending entirely on its Author.

ORIGINAL LECTURES.

LECTURES

ON

BLOOD DISEASES.

By HENRY ANCELL, Esq.

ON TUBERCULOSIS,

REGARDED AS A DISEASE OF THE BLOOD, AND THE ORIGIN OF SCROFULA, CONSUMPTION, TUBERCULAR MENINGITIS, MESENTERIC DECLINE, AND OTHER FORMS OF DISEASE DEPENDING UPON THE LOCAL MANIFESTATION OF ITS PATHOLOGICAL PRODUCTS.

LECTURE XI.

Pathological Anatomy of the Serous Membranes in Tuberculosis: General Remarks.—Pathology of the Synovial Membranes; Effusions and other Results of Chronic Inflammation; Modifications of Structure; Fungosity; Adhesion; Ulceration; Suppuration; Perforation; Destruction of the Subjacent Tissues, and particularly of the Cartilages; Sinuses and External Ulceration; the Deposit of Tubercle.—Pathological Anatomy of the Pleura; Adhesions; Effusions; other Results of Acute and Chronic Inflammation; the Deposit of Tubercle; Tubercle in False Membranes; Tubercles in the Pleuræ in Children; Intra-pleural Tubercles; Extra or Sub pleural Tubercles; Perforations of the Pleura; Empyema.—Pathological Anatomy of the Pericardium; Tubercles in the Pericardium; in Children.

THE PATHOLOGICAL ANATOMY OF THE SEROUS MEMBRANES IN TUBERCULOSIS.

In individuals of the tuberculous predisposition from various causes, as the tenuity of the blood, or the delicate structure of some of the serous membranes, the natural serous effusion may be easily increased in quantity. Inflammatory action, and all its consequences, are of frequent occurrence, particularly the effusions of inflammation; the fluid thus effused being thinner and less plastic than in a healthy state of blood. This is witnessed in the pleura, peritoneum, and arachnoid; the fluid, under favourable circumstances, is also very readily resorbed, but is liable to leave solidified particles and flakes in that which remains, rendering it turbid, and it is sometimes sanguineous. Tuberculous subjects appear to be particularly subject to chronic and acute inflammatory affections of the serous membranes, produced by the usual occasional causes of inflammation, as well as by the deposit of tubercle. These inflammations are met with in children as well as adults; they occur when the blood is only slightly tuberculous, its tuberculisation being immature, when they run a course distinct from the ordinary course of inflammation in otherwise healthy subjects, but without the deposit of tubercle in any of the tissues or organs. The serous membranes, in matured tuberculosis, are also liable to the deposit and aggregation of tubercle totally irrespective of inflammatory action. This deposit may either be primary or secondary,—that is to say, it may take place during the progress of tuberculosis before tubercle has been deposited in any other organ,—by far the rarer case,—or after it has been deposited in some other tissue or organ, and especially in the lungs or absorbent glands. The tubercles, in their simple and uncomplicated state, are usually found in the sub-serous cellular tissue or visceral aspect of the serous membrane; but collections are by no means limited to this surface; they occur on the free or unattached surface; hence they have been termed intra and extra serous tubercles, and, according to some pathologists, they are met with in the substance or intimate structure of the membrane. Gelatinous, semi-transparent grey or yellow tubercle, either as miliary granulation, distinct tubercle, in layers or in the infiltrated form, are met with, but by no means equally in all these membranes, and there are several remarkable specialties in this respect. While small, or in the state of miliary granulation, they usually assume a lenticular form; and extend into plates or laminæ when abundant; the form being attributable to the stretching of the membrane over a resisting tissue. Softening of tubercle, but more particularly ulceration in this tissue, as compared with the skin and mucous membranes, are rare; and the serous membranes frequently oppose themselves to the extension of ulceration from the subjacent parts. These membranes, however, occasionally give way by rupture from pressure and distension, and occasionally by the extension of ulceration, constituting perforation. In children, tuberculization of the serous membranes sometimes occurs to a very great extent, and nearly to the exclusion of all other organs, the deposit of tubercle, under these circumstances, being attended with all the most aggravated symptoms of general tuberculosis. The disease has been called serous phthisis. I shall classify the synovial membranes of the joints with the other serous membranes; for, although tuberculous or scrofulous affections of the joints are more frequently associated with other signs of external scrofula, and, owing to some difference in their organization, as also of the organization of the parts which they cover, their pathological lesions, essentially the same as those of the serous membranes, present corresponding differences, yet there can be no doubt that the so-called "scrofulous" affections of joints owe all that is specific in their history to the tuberculous affection of the blood and the tuberculous organization of the tissues, and that the pathology of these affections belongs to the general subject of tuberculosis as a disease of the blood.

OF THE SYNOVIAL MEMBRANES.

Tuberculous subjects, when affected with the disease of the blood to that extent only which I have described as a predisposition, are extremely liable to affections of the joints, which frequently consist in or take their origin from inflammation of the synovial membrane. Under the designation of scrofulous affections of the joints, they are treated of by all surgical writers. Tuberculous synovitis is accordingly a common occurrence in young persons; it assumes for the most part a chronic form, but may be acute or subacute, and the pathological appearances presented by the synovial membrane in tuberculous (scrofulous) subjects are mainly attributable to it. These appearances are in many respects analogous to those presented by the pleura and the peritoneum, which will be subsequently described. The synovia becomes a turbid, dirty, reddish fluid, sometimes thin and very abundant, sometimes thicker than usual, and frequently mixed with pus and with flocculi of fibrine or false membrane. The membrane loses its smooth and polished aspect, and becomes papilliform or velvety, of a more or less vivid red colour, sometimes presenting ecchymoses, closely resembling the granulated conjunctiva of long continued chronic inflammation; and it ultimately degenerates into a gelatinous, soft or pulpy, white or greyish substance. Lebert describes more particularly the microscopic aspect of these membranes in their state of increased vascularity—sometimes they are uniformly reddened from a general increased development of vessels; sometimes they present a series of minute deep red papillary eminences on a rose-coloured base, produced by a circumscribed and disseminated development of vessels, at numerous points in which may be recognised tortuous, interlaced, vascular nooses, the vessels being triple the calibre of their natural condition, gorged with blood plasma, and surrounded by very slightly vascular interstices. The membrane then soon loses its smooth and polished aspect, owing to the disappearance of its epithelium and(a) the deposit of a fibrous layer infiltrated with serosity, which gradually assumes the form of a fibro-plastic tissue, becoming unequal and rugose. In rare and exceptional cases, the epithelial layer increases in volume before it disappears, and its folds are then frequently infiltrated with fatty granules. The sub-synovial cellular tissue is frequently the seat of a more or less abundant fibro-plastic effusion, sometimes red and vascular, sometimes pale and of a fibrous aspect, and the adipose tissues surrounding the joint may, in like manner, become infiltrated with fibro-plastic elements. Sometimes pseudo-membranous flocculi cover the internal surface of the highly injected synovial membrane; and purulent effusion into its cavity occurs, although not very frequently.

(a) Lib. Cit. p. 375.

The false membranes increase in extent, and are sometimes deposited in super-imposed layers, but Lebert never found them adherent and vascular as in the pleura and peritoneum; although it is quite possible they may become organised. Microscopically they appear to be composed of fibrine interspersed with pus globules. The pus is generally mixed with synovia and of less consistence than ordinary pus, and the pus globules are frequently deprived of their nuclei (globules pyoides); it also contains curdy concretions, fatty elements, and blood corpuscles, and in some rare cases the false membranes undergo a kind of cretaceous transformation, and contain amorphous mineral masses.

The synovial and sub-synovial tissues in the chronic inflammation of tuberculous subjects also generally undergo that particular transformation which has been called *fungoid* or *lardaceous*. This, according to Lebert, consists of a simple fibrous or fibro-plastic hypertrophy, so frequent a consequence of chronic inflammation. The tissue around the articulation becomes generally of a pale yellow colour, of an elastic consistence, and by pressure it yields a yellowish transparent juice. Under the microscope it presents a fibrous net-work, in which alternates a tissue composed of fusiform bodies, with a more decidedly fibrous tissue, and in the liquid there are divers fibro-plastic elements mixed with liquid or vesicular fat. This tissue may retrograde and become pale from undergoing a more complete fibrous transformation, or it may increase in vascularity, and present a deep red or flesh colour. Bonnet, of Lyons, concludes, from chemical experiments, that these fungosities of the synovial membrane are analogous to false membranes, differing only by the blood which penetrates them, and the capillary vessels which permeate their substance. They are sometimes so intimately associated with the synovial membrane, that the latter cannot be distinguished; sometimes it can be seen that the membrane still exists, being only slightly thickened, the fungoid mass belonging almost altogether to the subjacent tissues. When the disease retrogrades, the fibro-plastic tissue may sometimes be detected externally by palpation, or it may form into irregular, indurated, and to a certain extent cartilaginous masses. When these fungosities occupy the whole extent of the membrane, the latter is sometimes plainly defined externally.

This degeneration of the synovial membrane in tuberculous subjects frequently results in ulceration, which may take place from without inwards, or from within outwards, and destruction of the subjacent cartilages is the result. Their destruction is called erosion by those who deny the vascularity of cartilage, and ulceration by those who admit it. Lebert says, "the cartilages lose their elasticity, and become eroded and more and more altered in structure without being inflamed." Pus also frequently finds its way from the joint to the external surface, the destruction of the sub-synovial tissues rapidly advancing, the ligaments become disintegrated and relaxed, the bones inflamed, the whole of the texture irreparably injured, the entire joint disorganised, and luxation may occur. In other cases, tuberculous inflammation of a joint, whether proceeding from the synovial membrane or otherwise, may remain comparatively indolent, the cartilages being absorbed. The affections of joints originating in the synovial membrane in tuberculous subjects, require to be distinguished from those which will subsequently be described as originating in the bone in the same disease, which are frequently produced by a deposit of tubercle. Chronic synovitis in tuberculous subjects occurs especially in the hip-joint, the knee, and the elbow.

Tuberculous synovitis frequently occurs together with other local external tuberculous affections, as superficial ulcers, glandular swellings, &c. Its specific nature is best determined by reference to the existence or non-existence of those constitutional symptoms which I have described as characterising a tuberculous condition of the blood. Tuberculous synovitis is perhaps more frequently a secondary than a primary affection, as proceeding from tubercular disease of the bone, and will have again to be referred to when treating of tuberculous affections of the latter structure; this membrane is also sometimes eroded and perforated from without, owing to abscesses which have their origin externally.

Some difference of opinion appears to exist as to the fact of the deposit of tubercle in the synovial membrane. A fatty deposit is frequently met with, sometimes in considerable quantity, on the internal surface of the membrane, and becomes the seat of a fibro-plastic infiltration, which has been regarded as tubercle. Lebert states that its colour is deep yellow and its aspect shining; it is soft and elastic, greases the scalpel, and under the microscope it presents adipose and fibro-plastic elements but no tubercle corpuscles, and he denies its tubercular character. According to Rokitanski, the synovial membranes are the seat of tubercle as a product of inflammation, the inflammation co-existing with that of other large serous membranes, and occurring in advanced tuberculosis of other parenchymatous organs, in a high degree of general tuberculosis. When the exudation softens and suppurates, the capsule of the joint ulcerates, and secondary tuberculosis and tubercular ulceration of the bones ensue;(a) but when a joint is generally affected with tuberculosis, the morbid deposit occurs for the most part in the structure invested by the serous membrane, (viz., the bone,) to a certain extent corresponding with that which happens elsewhere, as in the lungs; tubercle being much less frequent in the pleura than in the lungs. When tuberculosis (scrofulous affection) of joints proves fatal, tubercles are generally detected in the internal organs.

Certain analogies manifestly exist in the tubercular affections of the synovial membrane and those which will be described as occuring in the other serous membranes. Certain very obvious differences also present themselves. The latter are not more marked than would be predicated from the differences of cell-growth in the formation and nutrition of these membranes, the differences arising from the mechanical structure of the joints, and the difference in their natural fluid secretion. Affections of the joints in tuberculous subjects most frequently occur in youth, very frequently in those who are previously in comparative health, and who are most subjected to external and accidental exciting causes of disease – in those in whom the blood is not matured for the production of tubercle. They accordingly, as before stated, associate themselves with those affections which are designated as scrofulous in contra-distinction to those which are unequivocally tuberculous, but their history, progress, and termination are altogether referrible to the diseased condition of the blood which it is the object of these lectures to illustrate.

OF THE PLEURA.

The indications of previous inflammation and of the various pathological appearances common to serous membranes in tuberculosis, are met with after death, upon the whole, more frequently in the pleura than in either of the other membranes. They occur also much more frequently in this than in any other chronic disease. *Adhesions* were found by Louis in 111 out of 112 subjects; there was but one wherein the chest was perfectly free in every point of its surface. These adhesions generally correspond with cavities in the lung; the abundance of the adhesion, and the amount of disorganisation of the lung, bearing a direct proportion to each other. Sometimes they are cellular, easily torn, and limited to a small space. At other times they consist of condensed structure in the form of false membrane. In the first case the subjacent cavities do not exist, or are of small dimensions. In the latter, cavities of large dimensions are generally found. These adhesions are the results of chronic inflammation; they indicate the tendency of the pleural membrane to inflammatory action in tuberculosis; but the *post-mortem* appearances show clearly the primary influence of the disease of the lung, and especially of the cavities formed in the lung, as the cause of the inflammation which produces the adhesions. In two subjects, whose lungs contained only two masses of tubercle seated immediately under the pleura, adhesions occurred only at the corresponding points of the pleura; they were cellular in structure, and equalled the tuberculous masses in extent. This interpretation of the existence of adhesion has been confirmed by many observers.

Acute pleurisy is a very common occurrence in tuberculosis, and frequently cuts short the existence of its victims before the natural termination of the blood disease; it also frequently occurs towards the close of life, when the emaciation and debility have reached their maximum. This local affection also occurs in other chronic diseases, but by no means so frequently. Louis met with it in one-tenth of his cases. It sometimes gives rise to a very rapid effusion of clear fluid immediately before death, or to a turbid, reddish, or purulent effusion; it leaves every

(a) Path. Anat., Syd. Edit., p. 296.

variety of false membrane. Miliary tubercles in the pleura itself, or within its coagulable exudation, presently again to be noticed, frequently coincide with these pathological appearances; and this acute pleurisy is totally distinct from the mere local process, whether the latter be chronic or more or less acute, which gives rise to the adhesions above described, which mostly occur at the apex of the lung.

But the most important pathological fact in this section is the deposit of tubercles in the pleura. By some observers it has been affirmed that they are never primarily deposited either in the substance of the membrane or in its subjacent cellular tissue. Louis found grey granulations on the attached surface of the costal pleura, but he believes that they never assume this site without being present also, and, indeed, without having been previously deposited in the lungs. Other observers have met with different results. In 312 children, Rilliet and Barthez met with but one or two in which the pleura alone was tuberculous,(a) but in seven cases they found the pleura tuberculous to a great extent, no other organ containing more than a very inconsiderable quantity of the deposit; the pleura was tuberculous without the lungs being so in ten cases, and independently of the bronchial glands in six cases.

The false membranes covering the costal and pulmonary pleura sometimes contain tubercles, or are converted into tuberculous matter. Laennec observed this, and Hodgkin describes a false membrane lining the cavity of the pleura as being sprinkled with small opaque miliary tubercles which were apparently seated on the serous membrane. These membranes and the morbid deposit are generally of moderate consistence; but in one case Louis detected a semi-cartilaginous false membrane investing the apex of one lung, and presenting the tuberculous transformation.

The most important question respecting the tuberculisation of these false membranes remains. Fournet has affirmed that he several times met with miliary granulations in their substance, while the subjacent lung contained not a trace of such product, or presented simply a few granulations or slight tuberculous infiltrations of its peripheral substance. He also saw a large cavern in false membrane similarly situated, while there were only a few traces of commencing excavation in the pulmonary tissue; and has known the tuberculous deposition to advance from the false membrane outwards and affect the sub-costal cellular membrane only. Under these circumstances, the lung opposite, uninvested with false membrane, occasionally remained perfectly free from tubercle. From these alleged facts he draws the conclusion, that tuberculisation of pleuritic tissue may occur, contrary to the rule laid down by Louis, independently of pre-existing pulmonary disease—may, in fact, be primary and induce this morbid process consecutively in the lung; and this author's observations tend to prove that a similar mode of transmission from the serous membranes to the subjacent structures occasionally prevail in the intestines and brain. The soundness of his views has been disputed; (b) but if they should ultimately prove true, they will justify the establishment of a variety of the disease under the designation of tuberculosis pleuræ.

Carswell represents (Plate I. fig. iv. N.), from the lung of a cow, several tumours attached to the pleura pulmonalis both by a broad base and by slender necks, formed of a serous capsule containing tuberculous matter, the pleura costalis, gall ducts, and omentum, being studded with similar tumours.

No pathologists have more closely investigated the special pathological anatomy of the pleura in tuberculosis than Rilliet and Barthez in the cases of children who fell victims to the disease; they detected it on both surfaces, and hence describe intra and extra pleural tubercles.

A. INTRA-PLEURAL TUBERCLES.

1. Grey granulation occurs occasionally in the cavity of the pleura, and in one case this was the only kind of tubercle. 2. They describe flat and lenticular yellow granulations, adhering more or less intimately to the internal surface with a minute false membrane, at first secreted around the deposit, and afterwards between it and the pleura, so that the inflammatory product raised the granulation, and conveyed the idea of having secreted it; but the tubercle at other times exists as a foreign body, without any trace of inflammation. At other times, the pleura was covered with false membrane deposited in layers, each containing a considerable number of granulations; but, on raising the last layer, entire, small, perfectly isolated granulations were left in contact with the pleura, without any false membrane. These pathologists state, that in a majority of the cases the tubercle has not been formed in the false membrane, but anteriorly to it; in rare cases, false membrane and old adhesions contain tubercle, but this can only occur when, to a certain extent, the membranes have become organised. The yellow granulation tubercles are identical with those of the lungs, differing only in being in general flattened, although spherical ones have been met with. The false membranes surrounding pleural tubercles are vascular, but the vessels never penetrate the tubercles. The pleura subjacent to the granulation generally maintains its polish and transparency; sometimes a small circular depression is formed by the tubercle, occasionally it becomes opaline, and occasionally softens. 3. Miliary tubercles and specks of tubercular matter, resulting from a great number of the miliary tubercles uniting, are sometimes met with in the pleura. They are analogous to amorphous tubercrulous masses in the lungs.

Intra-pleural tubercles in children are generally dry and of a firm consistence; Rilliet and Barthez never saw them softened, or forming vomicæ, or perforating the serous membrane.

B. EXTRA OR SUB PLEURAL TUBERCLES.

These are developed under the pleura, between it and the tissue which it lines, but those only which occur under the costal pleura are recognised under this head; those occurring between the pleura and the lungs being in reality pulmonary tubercles. They are sometimes round, sometimes flattened; the latter sometimes project, and sometimes do not project, into the cavity. Round sub-pleural tubercles are most common in those parts of the membrane which adhere by cellular membrane most loosely to the subjacent tissues, as, for instance, on the anterior and posterior parts of the thorax. They form a series of round or ovoid tumours, which may compress the lungs on one aspect, or come into contact with the osseous or cartilaginous portions of the ribs on the other. Tubercles here are generally in the form of yellow infiltration or the miliary variety, rarely yellow granulation, and never grey granulation. In this latter respect they contrast with intra-pleural tubercles. They may soften, form caverns, perforate the pleura, and penetrate into its cavity, or communicate with pulmonary tubercles. The cavities may increase in size, being seated between the pleura and the intercostal muscles, or the denuded and partially destroyed ribs, forming irregular anfractuous caverns, sometimes running into each other, and containing pus and softened tuberculous matter; the costal pleura ultimately becoming perforated, and the tuberculous matter, orginally contained in the cavern, discharged into the pleural sac. This is, however, a rare occurrence. Sometimes adhesions take place between the two pleuræ; and, again, the extra-pleural cavern may have a communication established with the lungs by a large perforation through the pulmonary pleura, the latter being ulcerated from within outwards; or a pulmonary cavern may serve as a medium of communication between the external surface of the costal pleura and the bronchi.

Tubercles in the pleuræ of children are generally deposited on both sides of the chest; when otherwise, they more frequently occur on the right side than the left; but extensive pleural tuberculisation is almost always unilateral, and it is a very rare circumstance to find intra and extra pleural tubercles at one and the same time.

Perforations of the pleura, which have given rise to pneumothorax, occasionally occur in tuberculosis, owing to the extension of a cavity from the lung. This result is, for the most part, obviated by the intimate adhesions which have been described, but sometimes the adhesions are incomplete, and a small superficial cavity is followed by sloughing and destruction of the pleural coverings. The resulting perforations are never large, have mostly a narrow fissure or oval aperture, three or four lines long, in the midst of a very soft, dirty yellowish or greyish texture, which tears under the slightest pressure. These perforations are generally situated in the neighbourhood of the third or fourth rib, and somewhat laterally in the direction of the axilla. For the most part a fatal result rapidly follows this accident, and all the

(a) Maladies des Enfans, Tome III. pp. 49 et 52.
(b) *British and Foreign Review*, Vol. IX., p. 375.

signs of violent pleurisy are met with, viz., granulation of the whole serous surface with a greyish and very soft mass, purulent fluid, dirty yellow purulent false membranes, and accumulation of gas; the lung is always compressed to the utmost, unless kept permanently distended by adhesions. Near the perforation the effort of nature to repair the injury, by coating the part with coagulable materials is very evident, and when the fatal issue is delayed, (which in one case under my own eye happened for two months,) the perforation is surrounded by adhesions confining the mischief within narrow bounds. (Vide Hasse, p. 337.) Empyema is sometimes the result of perforation. Violent inflammation occurs in the serous membrane, the surface of the pleura soon becomes dull and of a dingy grey, at the same time secreting a thick tenacious fluid which is partly distributed in flat very soft granules, partly collected at the base of the serous cavity, but sometimes pure liquid pus forms in great abundance; frequently, however, it is mingled with coagulable substances which become deposited on, or loosely adhere to the pleura, or float in the collected fluid as soft flakes or pellets. The pus sometimes becomes sequestered within strong false membranes, the patient surviving for a long period, and ultimately dying of the general tuberculosis rather than of this local affection. In illustration of extensive exudation of tuberculous matter from the surface of the pleura, Laennec reports a case from M. Cayol, in which the entire cavity on the right side of the chest was filled with pus.

Perforation is by no means infrequent in children. 1. As in the adult, it may exist in connexion with a cavity, and may be the result of the gradual breaking down of its parietes. 2. It may result from the union of ganglio-pulmonary sub-pleural tuberculous masses. 3. It may depend upon the rupture of an emphysematous bulla. In general the lung is compressed against the vertebral column, at other times it is maintained forwards or backwards by adhesions, and these adhesions may limit the space containing the extravasated air. Sometimes there is no liquid effusion in the pleura after perforation, and an absence of any other sign of inflammation of the serous membrane. More frequently, however, there is an admixture of air and sero-purulent or purulent liquid in variable quantity. The gas is always free from odour, and, when the perforation has been of long standing, its seat can no longer be determined, adhesions existing which have closed the opening.

Rilliet and Barthez remark, that when the pleura is perforated in consequence of the progress of an extra-pleural vomica, the lung itself being sound, the tubercular matter may be evacuated, and, if the disease be of limited extent, a cure is not impossible (p. 330.) A cure is still more probable if the sub-pleural tubercle, instead of traversing the lung, communicates directly with the bronchi. A case of this kind occurred in which a tuberculous mass, having perforated the costal pleura under which it was originally seated, was connected with the root of the lung and along the bronchia of the inferior lobe; an adhesion had taken place between the periphery of the pleural ulceration and the pulmonary pleura, and then the tubercle softened; in destroying the adhesions, a depression the size of an almond was produced in the lung, the base being formed by a kind of fibrous tissue which appeared continuous with the pulmonary pleura, without any direct communication with the lung; the bronchia which stretched along another part of the surface of the cavity was perforated in two places from without inwards; thus a vomica existed in the pleura which communicated with the bronchia without the intervention of the lung.

In the progress of general tuberculosis the affections of the pleura are of the highest importance, as frequently cutting short the blood disease by a prematurely fatal result.

OF THE PERICARDIUM.

This membrane forms no exception to the other serous membranes in its habitudes in tuberculosis, but it is by no means so frequently affected as the synovial membrane, the pleuræ, or the peritoneum. Adhesions and the occurrence of false membranes are rare. Louis found the pericardium adherent to the heart in two only of 123 cases of phthisis. Hasse describes tuberculous pericarditis: either a turbid grey liquor more or less thin, is at the outset discharged into the sac, whilst the free surfaces of the pericardium become the seat of plastic deposit consisting of greyish white or faint yellowish, flat, tolerably firm aggregated granules of an undoubted tuberculous character; or else a number of greyish-white granules as large as a pin's head congregate in the midst of plastic effusion and continue accumulating, and whilst the organised portion of the effused fluid is effecting an adhesion between the heart and pericardium, these granules form into greater or smaller masses of tubercle, which, after absorption of the fluid parts, may assume a mealy consistence; but in all such cases tubercles of older date are found in other organs.

Tubercle may be deposited in or under the pericardium. Baillie met with one case in which two or three "scrofulous tumours" grew within the cavity of the pericardium, one nearly as large as a walnut; they consisted of white, soft matter, somewhat resembling curd or new cheese. Louis mentions a case in which some semi-transparent granulations were seated under the serous laminæ of the pericardium, and were probably the exciting cause of pericarditis. Tuberculous pericarditis may also extend from the pleura in tuberculous pleuritis. Louis never met with tubercle or grey granulation in this membrane without finding a certain number in the lungs. When tubercles are developed in the pericardium, they will most likely produce death, although the lungs should contain few or none.

In children, according to Rilliet and Barthez, tubercles in the pericardium are also rare. They found them ten times in 312 individuals, and twice only to any great extent. The most frequent form was miliary tubercle seated under the visceral fold; they are for the most part very small, but occasionally, especially when the pericardium does not adhere very firmly to the heart, they attain a larger size, even that of an almond. As in the pleura, once developed, they produce chronic inflammation with the production of tuberculous false membrane. These pathologists give a case in which the tuberculous masses on the visceral sub-serous tissue gradually penetrated between the fleshy fibres, and some of the tubercles were on the point of penetrating the endocardium; hypertrophy of the heart was one of the results, and the two surfaces of the pericardium had adhered by inflammatory action, forming a resistance to their progress externally.

[To be continued.]

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, Esq., F.R.C.S.,
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LECTURE XVI.

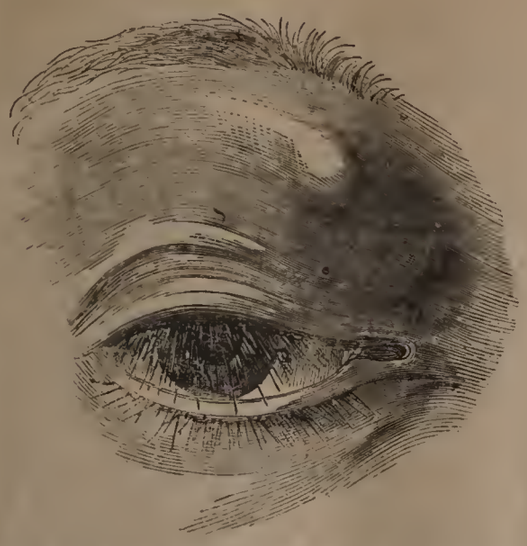
TUMOURS CONTINUED.—Usual position of Orbital Tumours.—Prevalence of the Steatomatous Variety.—Case of Sero-cystic Tumour.—Fatty Tumours of the Eye.—Nævi.—Tumours of the Sclerotica.—Danger of their Removal.—Pterygium.—Staphyloma.—Importance of early operation.

THE upper and the outer parts of the circumference of the orbit are common sites of encysted tumours, and the steatomatous variety chiefly prevails. So frequently do they adhere to the periosteum of the orbit that the occurrence should be expected, and allowance made for it during their removal, by keeping the edge of the knife rather away from their surface, after the superficial dissection has been completed, (which is opposed to the general rule for the extirpation of tumours,) or in all probability the cyst will be cut into unexpectedly. Even with the exercise of the utmost care in operating, these tumours cannot be removed entire except the opening in the skin be ample. The advantage of getting them out whole is very important, being a certain assurance that the cyst has been taken away, and which more than compensates for the troublesomeness of the dissection, for it requires nicety to remove them *en masse*. When the cyst collapses it must be seized with the tenaculum forceps, drawn forwards, and detached. It is a fact, that in the removal of tumours in general, and especially of small tumours, the integuments are too sparingly opened.

These orbital tumours grow slowly, and are seldom allowed to arrive at any magnitude; yet I have myself operated on some as large as a pigeon's egg, and seen a few still larger.

Here is a sketch which represents the front view of a

tumour situated at the circumference of the orbit of the right eye of a female aged 43.



It projected three quarters of an inch from the brow, which was greatly elevated by it. Its orbital limit was beyond the reach of the finger; it was hard and immovable. The eyeball protruded, and the power of raising the lid was nearly lost. There had been an unsuccessful attempt at its removal two years before, and the patient now sought aid in consequence of the fast departing sight of the eye; she deprecated the idea that she could be freed from the tumour, and it required no little persuasion to remove her scepticism, and induce her to let me have a trial at its extirpation. In May, 1848, with the assistance of Mr. R. G. Shute and Mr. Baker, I operated and removed it entire. It was sero-cystic. I divided the skin crucially. I never adopt that form of incision when I can help it, for the angles of the flaps do not generally admit of being brought accurately together, they are apt to slough, and at best it makes a conspicuous scar. The bleeding was copious and difficult to suppress, and hampered us considerably. The orbital portion of the tumour was flattened and reached to about the centre of the orbit, and adhered to the periosteum. Her recovery was slow; the wound was six weeks in healing, but before that the position of the eye was quite restored.

On the outer side of the globe behind the conjunctiva, and between the superior and external recti muscles, fatty tumours are sometimes met with. I have not seen many of them, and the largest was not above the size of a pea. Their existence is usually recognised by the fulness or protrusion of the lid opposite their seat. Their removal is a very simple affair; the lid should be raised by an assistant, the conjunctiva divided, the tumour seized with a pair of tenaculum forceps, pulled forwards, and dissected out. When the conjunctiva and the tumour are adherent, an endeavour should be made to separate them; and when some of the conjunctiva must be removed, no more should be taken away than is absolutely necessary.

A case is recorded in the *London Journal of Medicine* of two fatty tumours symmetrically situated at the outer part of each globe, and so much did they resemble œdema of the outer portions of the lid, that an operation was performed on one lid under that impression, when, after incisions through the skin and orbicular muscle and fascia had been made, with the intention of removing a piece of each of these tissues, out started a mass of fat.

The orbit may give rise to bony growths, (exostoses) and some of them admit of removal. I have not had any practical acquaintance with them.

Those anomalies of the vascular system called nævi, are so very common, and the methods of destroying them are so effectual, so generally known, and so universally practised, that I should not have mentioned the subject in a short elementary course like this, were there not special practical points arising out of their connexion with the parts about the eye. These relate to the prevention of distortion of the lids by the contraction of the cicatrices, which must form after most of the ordinarily employed methods of treating the affection, and to the limitation of the destructive agency to the nævus itself, a circumstance not often attended to, because in general of little or no consequence. These indications are, I believe, best fulfilled by the employment of a seton which has been saturated in a caustic fluid. It possesses the great advantage of being applicable alike to the cutaneous, subcutaneous, or mixed kind of nævi. The avoidance of disfiguration is equally called for when any part of the face is the subject of operation, and need not be particularly dwelt on here. I shall give a case illustrative of this escharotico-seton treatment.

The daughter of a medical man was born with a bright red minute nævus at the inner angle of the right eye, just over the lachrymal sac. It grew fast, and in three months had attained the size of a bean, having increased principally in a downward direction. Three twisted threads which had been soaked in a solution of caustic potass were passed into it with a curved needle, and retained for three days. Very slight inflammation ensued, but a healthy eschar formed, and the nævus was cured. There was not any contraction of the skin or of the cartilages of the lids, and the lachrymal sac was not injured in the slightest degree, and now, after several years, the scar is barely perceptible.

Here then were the very circumstances to produce most untoward events by the ordinary methods of operating. Very little contraction of the parts internal to the angle of the lids would have so acted on them as to pull the puncta away from the globes, the effect of which you well know. Again, the contraction, especially if considerable, might have acted injuriously on the lachrymal sac. I shall not stop to speculate on the chances of other evils.

The seton can be easily re-applied if the first use of it fail. It should not be condemned from a single failure. More than one seton may be advantageously used at once in the same nævus, and the length of time for retaining a seton should depend on the amount of inflammation required. It is quite probable that nævi may be met with in which the seton may be advantageously combined with some other plan.

There is a little sclerotic tumour, about which I shall give you some warning; it is small, well defined, resembling in structure that of the sclerotica, uncertain as to vascularity, density, and connexion with the conjunctiva. It is very rare; I have seen two in the same eye, one on each side of the cornea, and the external encroaching on it. It disfigures rather than injures the eye; and, as there is danger attending its removal, it should be left alone. The late Mr. Tyrrell told me that he knew of two cases which had been submitted to operation, and in the one the vitreous humour escaped when the tumour was sliced off, and the eye collapsed; in the other the operation was abandoned. The incorporation of the tumour with the sclerotica caused apprehension lest its removal should make an aperture in the globe.

Pterygium is a portion of conjunctiva oculi which has become thickened and vascular, the vessels generally running parallel. It is triangular, and the apex is always towards the cornea, and the base towards the orbit. The growth commences at the corneal end, and, after the orbital limit has been reached, the cornea is generally encroached on to a greater or lesser extent.

A pterygium may be removed with a knife or a pair of scissars. I use the latter instrument, and operate in the following manner:—I seize the pterygium about the middle with a pair of tenaculum forceps, raise it from the globe, snip through the apex just at the margin of the cornea, and dissect it off from apex to base. The healthy conjunctiva should be spared as much as possible. Rest of the eye is the only after-treatment required.(a)

Staphyloma of the cornea may require to be removed either on account of its unsightliness or the irritation it causes; very frequently the sound eye becomes affected by sympathetic inflammation. It is an object, that a part of the vitreous humour be saved, so that some form of the globe may remain for the adaptation of an artificial eye. When the staphyloma is partial, that is, when but a part of the cornea is involved, the probability is, that more or less of the humour can be saved; not so when it is entire, or involves all of the cornea, but were the eye collapsed, a sort of useful stump of the tunics alone will remain if none of the sclerotica has been cut away. True, the glass eye cannot be moved about in concert with the natural one, as in the other case, but still, there will be something for it to rest upon.

(a) My friend Mr. Browne, of Belfast, tells me in a communication just received from him, that he unites the cut conjunctiva by fine sutures, and it heals at once.

I find that the easiest and quickest way of operating is, to take hold of the staphyloma with a pair of long and sharp-toothed tenaculum forceps, and cut it off to the required extent. The patient should be kept very quiet for ten days or a fortnight, and the eye should be guarded from injury or pressure, in order that the cut surface may heal over, but this precaution is unnecessary, where there is no hope of retaining some form of the eye.

Observing that the excision of a staphyloma was not necessarily followed by the collapse of the eye from the loss of vitreous humour, or from suppurative inflammation, it occurred to me that if a growing but circumscribed staphyloma, seated on a tolerably healthy cornea, was removed while yet small, its increase would be stopped, and the fulness and the form of the eye retained. Singularly enough, just after I had been thinking over the subject, I met with a patient whose eye seemed suited for the practice. She was a child six months old, had been affected with purulent ophthalmia a few days after birth, and now had a staphyloma in the left eye. It was about the size of a No. 1 shot, and stood out well defined from the lower part of an opaque and somewhat irregular cornea, and was sensibly increasing. The volume of the globe was a little reduced. I shaved off the staphyloma, and kept the child quiet for several days. The wound healed over with a firm cicatrix, and when I saw her, eighteen months after, the cicatrix continued sound. If a small staphyloma were even stationary, were it well adapted for the operation, I would remove it. There are few persons, even among the rich, who would not prefer the wreck of a natural eye so long as it retained, or nearly retained, its fulness, to a glass one. The costliness of an artificial eye, the necessity of its renewal, and the trouble incidental to its being worn, renders its use among the poorer classes a circumstance of rarity, and how important is it, therefore, to save them from the unsightliness of a collapsed eye.

There remains but one more lecture to conclude my course.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

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(Continued from page 538.)

FIFTEENTH PAPER.

MODEL CASES OF RELAPSING FEVER.

Case 42—In a lad aged 17 years—sudden sense of weariness—drowsiness—frontal headache—vertigo—loss of appetite—hot and dry skin—furred tongue—on the 8th and 9th days of disease profuse sweating, followed by *sudden convalescence—relapse* on the 17th day of disease—quick pulse—hot and dry skin—frontal headache—white tongue—on the 20th day *restoration to health.*

Henry F., aged 17, a moderately stout fair lad, a street beggar, without settled residence, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, May 31st, 1849. His health before his present illness had been good, with the exception of an abscess in the vicinity of the anus, in 1839.

On Sunday, May 25th, about 7 p.m., he was seized with sense of fatigue and drowsiness; he went to bed and slept well. The next morning he suffered from frontal headache, vertigo, and loss of appetite, and felt sleepy all day. His bowels at this time were regular. He took to his bed on entering the workhouse, on Wednesday, May 29th.

On admission into the hospital, on the 7th day of illness, his skin was hot and dry; tongue furred; bowels regular.

On the 8th day I noted as follows:—

Sweated freely last night for the first time since outset of illness.

Slept but little; mind clear; vertigo in erect position; no headache; conjunctivæ pale; pupils normal; expression natural.

Walks with some little difficulty on account of debility.

Tongue moist, white, loaded; one stool; no appetite; much thirst.

Pulse 72, soft; no cough; no abnormal physical chest signs; skin warm, no spots; no miliary vesicles.

The following night he again sweated freely; and on the 9th day his pulse was still 72 and soft, and his skin moist.

On the 11th day of disease his appetite was noted to have returned, and his tongue was cleaning.

He was considered convalescent, and no report was made till, on the 17th day from the outset, I noted:—

Pulse 120; skin dry and rather hot; slept well last night; no rigors; some frontal headache; tongue white; no stool; some appetite.

Hyd. c. cretâ, gr. iv. st. sumend.; ol. ricini ʒss. horas tres post pulv.

The aperient acted five times, yet on the following, *i. e.*, the 18th day, the pulse was still 120, and the skin hot and dry. During the subsequent night he sweated much, and the next morning the skin, being yet moist, was cool, and the pulse only 96; on the 20th day it had fallen to 72; the skin was cool, and the appetite was good; in fact, the lad was well, and continued so till he left the hospital.

Case 43—In a boy, aged 14 years, after exposure to the contagion of relapsing fever—sudden frontal headache—pain in the limbs—rigors—loss of appetite—regular bowels—herpetic eruption on upper lip—rapid pulse—hot skin—*sudden convalescence 9th day — relapse on the 19th day*—nausea—vomiting—sweating—quick pulse—hot skin—*convalescence* with pulse of 48 *on 20th day.*

John D., aged 14, black hair, fair skin, rather thin, a paper-stainer, brother to Peter D., case 44, and to William D., was admitted into the London Fever Hospital, November 13th, 1849, under the care of Dr. Tweedie; he had been an inmate of the hospital six months before.

On Monday, November 11th, about 8 a.m. (having felt quite well when he first rose in the morning), while at work, John D. was suddenly seized with frontal headache and pain in the limbs; at noon he had rigors, and alternately sense of chilliness and heat; his bowels were regular. He took to his bed on Monday morning, and from that time till his admission into the hospital ate nothing. He sweated a little on Tuesday morning; there was no vomiting, and no epistaxis.

On the 6th day of disease I noted:—

Little headache; slept several hours last night, talked while asleep; no delirium; memory good; mind natural; complains of a bitter taste in the mouth; other special senses natural; conjunctivæ pale; pupils normal; no flush of face.

Can leave his bed unassisted with facility, and even walk a little without aid.

Upper lip swollen and red over a spot near half an inch in diameter; tongue moist, furred, white at the edges, dry in the centre; one stool, relaxed and dark; much thirst, no appetite; no vomiting; a little gurgling; splenic dulness vertically four fingers' breadth, does not extend below the last false rib; liver dulness of natural extent; no abnormal fulness nor resonance, and no tenderness of the abdomen.

Pulse 120, full, of good power; heart's sounds healthy; sonorous râle *very trifling* in amount on deep inspiration; no abnormal dulness of thorax; skin hot and dry, not sallow; numerous minute circular purple spots, unaffected by pressure, (flea bites?) scattered over the whole surface (the lad was very dirty on his admission); no trace of rose spots nor of mulberry rash.

7th day.—Pulse 120; respirations 40; no cough; no sonorous râle; skin hot and dry, no sallowness; sleeps much. From red swollen spot on the upper lip a little serous fluid has been discharged.

Sleeps much night and day, occasionally calls out loudly in his sleep; no headache; no delirium; no flushing of face; tongue dry and of a pale yellowish colour in the centre; three watery stools; liver dulness and other abdominal signs as yesterday; retched much this morning while out of bed, but ejected nothing from the stomach.

Two grains of acetate of lead, and five minims of Batley's

sedative, were ordered to be administered, with a drachm of dilute acetic acid, every six hours.

8th day.—Pulse 124; sleeps almost constantly; dozing again directly after being aroused; moans occasionally in his sleep. Tongue moist, centre covered with dark thick brown fur; two stools; skin dry and hot; unable to leave his bed unassisted.

All medicine to be omitted.

9th day.—Pulse 72, soft; respirations 18; expression much improved; sleeps well, not too much; many vesicles on the red spot on the upper lip; tongue moist, furred posteriorly; a little appetite; three stools, dark, relaxed. No sweating; skin soft and of normal temperature.

No further note was taken till the 12th day of disease, when the pulse had fallen to 60; the skin was normal in all particulars; the tongue was moist and clean; appetite good; bowels regular, *i.e.*, one stool daily. But, about two o'clock on the morning of the 19th day, he awoke disturbed by nausea, and soon vomited. He subsequently slept, and perspired profusely. He had no rigors. His bowels had acted on the 18th day once, and again during the night. When I saw him on the 19th day, the pulse was 84; skin hot and dry, and an abundant crop of sudamina covered the whole surface of the abdomen and thorax. He had still a little desire for food. A little simple saline mixture, with acetate of ammonia, was prescribed.

On the following, the 20th day, the pulse had fallen to 48; he had slept well; the sudamina were drying up; his skin was of normal temperature; he passed two solid stools, and, with the exception of the tongue being thinly furred, he was well.

Case 44.—In a child aged 8 years, after exposure to the contagion of relapsing fever—sudden headache—pains in the limbs—rigors—vomiting—sweating—noise in the ears—regular bowels—quick pulse—hot and dry skin. *Convalescence on the 9th day.*

Relapse on the 21st day—hot skin—quick pulse—*convalescence on the 22nd day.*

Peter D., aged 7, an intelligent, fair, thin child, was admitted into the London Fever Hospital Nov. 13, 1849, under Dr. Tweedie. He stated that he had "the fever" three months before his admission. On Sunday, Nov. 10, on first rising in the morning, with headache, pains in the limbs, chilliness, and rigors. On Sunday afternoon he vomited repeatedly, and sweated, according to his own account, all the same night. His bowels were confined.

His two brothers were admitted into the hospital at the same time with Peter D.

On the 5th day of disease I noted:—

"No headache; mind normal; expression natural; colour of face good; noise, as the boy describes it, of 'bullocks a-bellowing in my ears;' other special senses normal. Conjunctivæ pale; pupils act healthily. Can walk a few steps unassisted. Tongue moist and white; two stools; ate a little bread to-day; no great thirst; no vomiting; no abnormal fulness nor resonance, and no tenderness of the abdomen."

Pulse 108; heart and breath-sounds natural.

Skin hot and dry; many minute circular purple spots, unaffected by pressure, (identical in appearance with one form of flea-bite,) scattered over the whole surface, (the boy was in a very dirty condition when brought into the hospital;) no trace of rose-spots nor of mulberry rash.

6th day.—Pulse 120; skin hot and dry; complains at the present time of much general headache. Slept for about three hours during the night; none to-day; screamed out frequently during the night, "My head, my head!" Pupils rather large; conjunctivæ pale; tongue red in the centre, furred posteriorly, tip and edges red; no vomiting; one stool; urine transparent, pale yellow. Six leeches to the temples. The head to be shaved, and cold water kept constantly applied. Two grains of mercury and chalk to be given every six hours.

On the 7th day the head symptoms were much less marked; and on the 8th day the pulse had fallen to 84, but he was still restless, and even somewhat weaker than at previous reports.

On the 9th day he was convalescent, the pulse being only 66, and the skin of normal temperature. There had been no sweating.

Peter D. continued well till the 29th of November, *i. e.*, the 20th day from the commencement of the disease, when he complained of feeling ill. His skin was hot, and his pulse had risen to 84.

On the 21st day, pulse 84; skin normal temperature; tongue moist, slightly furred; no stool.

The following day he was again well.

Case 45.—In a man aged 18 years—rigors—headache—nausea—vomiting—confined bowels—pain in back and limbs—dry tongue—perspiration—delirium—*convalescence on the 10th day—relapse on the 20th day*—vomiting—delirium—dry brown tongue—relaxed bowels—hot skin—quick pulse—*death on the 24th day.*

After death non-granular consolidation of the left lung—fatty liver, large spleen, containing numerous fibrinous deposits—abnormal vascularity of the mucous membrane of the bladder—other organs healthy.

William W., (a) aged 18, an engineer, was admitted July 21, 1847, into the London Fever Hospital, under the care of Dr. Tweedie. His illness began July the 17th, with rigors, headache, nausea, vomiting, and confined bowels.

6th day of disease.—Slight headache; pain in the back and limbs; pulse 90. No abnormal physical chest signs; no cough. Tongue dry and furred; bowels open. Skin perspiring. No spots. Mist. ammon. acet. The head to be kept wet with cold water.

7th day.—Slight headache; tongue cleaner; three stools; pulse 70.

8th day.—Has been delirious all night, frequently leaving his bed; eyes suffused. Tongue dry, slightly furred. One stool. Pulse 90. Pil. sapon. c. opio. gr. v. h. s. s.

9th day.—Asleep; passed a restless night; two stools.

10th day.—Pulse 80; sleeps well; tongue clean; one stool. He was noted to be convalescent.

On the 20th day he was seized with vomiting; delirium returned during the night, and on the following morning his tongue was dry and brown. He passed three stools, the vomiting continued, and his skin was hot.

On the 23rd day the following note was made:—

Pulse 112; skin hot and dry. Almost constant talking. Sordes about the teeth; tongue dry and fissured; two stools. He died before the visit on the 24th day of disease.

The following notes were made on examining the body of Wm. W.:—

Cadaveric rigidity well marked. Purplish discoloration of the posterior part of the trunk and extremities. Muscles brighter red than ordinary.

Head.—Membranes of the brain normal.

A little colourless serosity at the base of the brain, and about one ounce in the ventricles.

Substance of the brain firm.

Thorax.—A small quantity of transparent yellowish serosity in the *pericardium;* the membrane itself healthy.

Heart.—Weight 8¾ oz. Substance, valves, and lining membrane normal.

A large fibrinous clot in the right auricle. A similar, but smaller clot in the right ventricle, continuous with one in the pulmonary artery. Similar coagula in the left auricle, ventricle, and aorta.

No adhesions of, and no fluid in either *pleura.*

Right Lung.—Weight 25 oz.; crepitant throughout. The inferior lobe is gorged with bloody serosity. In the substance of the apex of the superior lobe is a putty-like mass, ⅛ in. in diameter, containing gritty particles.

Left Lung.—Weight 34 oz. The apex of this lung resembled that of the opposite, except that it contained several little cretaceous and putty-like masses.

The inferior third of the superior lobe is of a deep red colour; its section is smooth and uniform; it contains much dark red serosity, and breaks down on pressure rather more readily than healthy lung; it sinks in water. The inferior lobe, with the exception of its extreme apex, resembles the inferior third of the superior lobe in all particulars.

The *bronchial tubes* of both lungs appear healthy.

The *bronchial glands* are large, dark, and firm.

Abdomen.—There is a little transparent serosity in the peritoneal cavity. The *peritoneum* appears healthy. The *mesenteric glands* are larger than natural; many the size of small beans, flattened, firm, and pale.

Liver.—Weight 65 oz. Substance flabby and soft; mottled externally and internally with delicate yellowish patches

(a) I am indebted to Dr. W. H. O'Sankey, for the notes of this case taken during life. The examination after death was made by myself.

Its capsule is thin and transparent; it separates with facility from the hepatic substance. (The microscope proved its cells to be loaded with fat.)

Gall Bladder.—Greatly distended with pale yellow watery bile. Lining membrane healthy.

Spleen.—Weight 20½ oz., dark and tolerably firm. Extending some distance into the substance of the organ at the anterior margin is a mass of a pale red colour, friable, having a finely granular fracture; it feels firmer than the adjacent spleen tissue; the line of demarcation is well marked. Deeper in the substance of the organ are several smaller masses, resembling in all particulars the one just described; there is also one on the surface, near to the inferior margin.

The *pancreas* weighs 2¾ oz.; it is normal in character.

The *stomach*, small and large intestines, healthy in all particulars. Peyer's patches very distinct, and of a somewhat deeper red than the surrounding mucous membrane.

The *kidneys* weigh 6½ oz. each; they are healthy in all particulars; no fat to be detected in cells by the aid of the microscope.

Pelves of the kidneys pale.

Urinary Bladder.—Mucous membrane studded anteriorly with red puncta, and posteriorly with somewhat larger red spots, almost continuous with each other. There is no abnormal redness near the urethral orifice.

Case 46.—In a man aged 60 years—repeated rigors—headache—furred tongue—confined bowels—epigastric tenderness—quick pulse—*convalescence on 7th day of disease—relapse on the 16th day*—rigors—quick pulse—hot and dry skin—furred tongue—confined bowels—vomiting of green fluid—free perspiration—permanent *convalescence the 18th day of disease.*

George R., aged 60, a harness-maker, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, November 1, 1847. He returned from Madras in 1840, where he had resided for forty years; while in India, he was seriously hurt by a fall from his horse. He suffered in 1818 from "severe dysentery;" a few years after he had some "disease of the liver;" for these affections he was repeatedly and largely leeched,—200 leeches having been, he says, applied at one time. The abdomen is *covered* with leech-bite scars. During the last seven years his health has been very good.

On Thursday, October 28, having been exposed to cold and wet the four preceding days, he was suddenly seized with rigors; the rigors were repeated several times before his admission. On the following day he suffered from headache.

On the 6th day of disease I noted:—

Frontal headache; mind normal; expression good; special senses unaffected.

Strength somewhat impaired, but he can leave his bed without assistance.

Tongue moist, furred; no stool; a little tenderness at the epigastrium; liver dulness occupies the epigastric region; no appetite.

Pulse 100; slight cough; little expectoration; no abnormal physical chest sign; heart's impulse feeble.

Skin cool; no spots. Ol. ricini, ℥ij., st. s.

He passed a restless night, and was asleep at the time I saw him on the following day. The castor oil had acted three times.

7th day.—Pulse 72; tongue moist, slightly furred; two stools; appetite good; skin cool; complains of slight frontal headache.

8th day.—Pulse 72; little sleep; no headache; complains of severe pains in the back and limbs; he states they are so stiff he can hardly turn in bed unassisted; tongue moist, clean; appetite good; one stool; stiffness of the limbs continued till the

16th day, when, early in the morning, he was seized with rigors. At the time of the visit the pulse was 108; skin hot, dry, and free from spots; tongue dry and slightly furred; there was much thirst; his bowels were confined. Two drachms of castor oil were administered directly.

17th day of disease.—Pulse 90; little sleep; no return of rigors; tongue as yesterday; five stools; vomited some green fluid this morning; skin warm, perspiring freely.

18th day.—Pulse 70; no vomiting; two stools. He was quite well on the 20th day.

Case 47.—In a man aged 30 years—rigors—headache—pains in the limbs—nausea—want of sleep—vertigo—furred tongue—loss of appetite—free perspiration—*convalescence on the 8th day of disease—relapse on the 18th day*—quick pulse—hot and dry skin—furred tongue—pain in the limbs—permanent *convalescence on the 20th day of disease.*

John F., aged 30, a labourer, of temperate habits, was admitted into the London Fever Hospital December 16, 1847, under the care of Dr. Tweedie. John F. had resided in London three years, and had till the present attack enjoyed health. His illness commenced on Sunday, December 12, with rigors, succeeded by heat and sweating, headache, pains in the limbs, and nausea; no epistaxis no vomiting; the bowels, at first confined, were acted on by medicine before he came under observation. He took to his bed on Monday, the 13th of December, *i.e.*, the 2nd day of disease.

6th day of disease.—Slept but little; no dreaming; vertigo on assuming the erect position; no affection of the special senses.

Tongue coated; three stools; no abnormal fulness, resonance, nor tenderness of the abdomen; no appetite; some thirst.

Pulse 96; trifling cough; skin moist; no spots.

7th day.—Pulse 108; headache increased; tongue loaded; three stools; much thirst; skin perspiring freely.

8th day.—Pulse 60; had a rigor last evening which was succeeded by heat and sweating; slept well; no headache; tongue clean; two stools.

On the 11th day his appetite had returned, and on the 14th day the pulse had fallen to 48. He appeared in health.

On the night of the 29th December, *i. e.*, the 18th day of illness, he had but little sleep, and on the following days I noted:—

19th day of disease.—Pulse 108; much pain in the limbs; skin hot and dry; tongue moist, thickly furred; four stools; no appetite.

20th day.—About nine o'clock last evening is reported by the nurse to have had severe rigors, which lasted twenty minutes. About five a.m., while at stool, he fainted. At the time of the visit, his pulse was 72; skin warm and perspiring freely.

On the 22nd day the pulse had fallen to 48, and he complained again of pains in the limbs; his tongue was clean; his appetite was returning.

No further note was taken.

Case 48.—In a boy, aged 14 years—headache—pain in the limbs—dry, brown tongue—confined bowels—*convalescence on the 13th day.*

Relapse on the 18th day—rapid pulse—hot skin—flushed cheeks—vomiting—profuse perspiration—permanent *convalescence on the 20th day.*

James D., aged 14, a skin-dresser was admitted into the London Fever Hospital, under Dr. Tweedie, Aug. 9th, 1847. Without known cause, a week before his admission, he was suddenly attacked with headache and pain in the limbs.

10th day of disease.—Mind normal; no headache; sleeps well. Tongue dry, brown; no stool 24 hours. Pulse 80. No cough; no abnormal physical chest signs; skin cool; no spots.

11th day.—Pulse 80; skin cool; two stools; tongue red; sordes about teeth.

12th day.—Pulse 84; cheeks flushed; two stools.

13th day.—Pulse 72; sleeps well; tongue moist, red; no stool. Hst. aperiens, ℥j. st. s.

16th day.—Gradually improving.

18th day.—Pulse 120; skin hot; cheeks flushed; tongue moist, red; three stools.

19th day.—Pulse 96; was troubled with vomiting during the night; tongue dry; two stools. Is now sweating profusely.

On the following day he appeared well.

The reader's attention is particularly directed to the following points connected with the seven cases above detailed:—

1st. The ages of the patients were respectively 7, 14, 14, 17, 18, 30, and 60 years. Relapsing fever, then, limits its attacks to no particular age.

2nd. Two of the cases were brought from the same house. The others, sleeping in common lodging-houses, &c., *might* have been exposed to contagion.

3rd. The case which proved fatal offered no lesion after death by which the fatal termination could be explained.

4th. These seven patients, after having suffered from attacks of simple fever, appeared convalescent; continued pretty well for 5, 9, 10, 10, 10, and 12 days respectively; and

then had a return of all the symptoms present in the first attack, *i. e.*, had true relapse.

[To be continued.]

AN ACCOUNT OF OPERATIONS FOR CATARACT ON BEARS.

By WHITE COOPER, F.R.C.S.

Having received several communications on the subject of certain operations recently performed by me at the Zoological Gardens, Regent's-park, the particulars may perhaps be acceptable, as these are, I believe, the first known operations for cataract on the larger carnivora.

The objections which have hitherto prevented this operation being performed on animals are, the presence of a powerful retractor muscle, which withdraws the eye with great force into the orbit, and the supposed necessity for artificial optical assistance after the cataracts have disappeared. The powerful action of the muscles of the lids was not to be overlooked; and, as regards the beasts of prey, their formidable means of resistance constituted another objection to any attempt for their relief.

The discovery of chloroform obviated many of these difficulties, as by its use the eye is completely at the command of the operator. The necessity for subsequent artificial assistance has been overrated. Without entering into the question of the reproduction of the lens, which the experiments of M. Leroy d'Etiolles have shown to take place in the rabbit, cat, and dog, and may therefore occur in other mammalia, though not in man, there are strong grounds for supposing that the sight of animals operated on for cataract when young, may be very materially recovered. The powers of nature in restoring vision under such circumstances are familiar to those who have paid attention to ophthalmic surgery, and numerous instances are recorded where, by depriving the eye of glasses, and compelling it as it were to accommodate itself to its altered condition, very useful sight has been restored even in old persons. The earlier in life the operation, the more perfect the recovery of the sight. If this be the case in man, whose restorative powers are far less active than those of the lower animals, we may reasonably suppose that the latter will not fall short of him in the amount of benefit received, and as the sight required by animals when domesticated, or in confinement at least, is less than that needed by man, I am of opinion, that if the cataract be removed in young animals, they will recover useful vision besides losing a considerable blemish.

The Grizzly Bears of the Rocky Mountains are the largest, most powerful, and most ferocious of the bear tribe, and without the aid of chloroform it would be utterly impossible to perform any delicate operation upon them. As, however, two of the three fine young grizzly bears recently added to the menagerie of the Zoological Society were blind, and their value thereby greatly diminished, Mr. Mitchell, Secretary to the Society, proposed to me to make an effort to restore them to sight. Dr. Snow having kindly undertaken the application of the chloroform, the first operation was performed on the 5th of last November.

The patient having been separated from the other bears, a strong leathern collar and chain was buckled round his neck, and the chain being passed round one of the front bars of the cage, two strong men proceeded to pull him to it as a bullock is hauled to the slaughtering ring. The bear was the size of a young donkey, and his resistance was quite remarkable; for full ten minutes he set their efforts at defiance, and ultimately it was only by the united strength of four men that he was placed in a position favourable for the application of the chloroform. Dr. Snow endeavoured to hold a sponge to his nose, but it was only by fairly tying it to his muzzle that the object was attained. The dropping of the paws, with the cessation of his roaring and struggles, told that he was insensible; and, the sponge being removed, he was laid with his head on a plank outside the den. A solution of atropine had been placed in the eyes on the previous evening, and the pupils were found fully dilated. The instrument used was a strong straight cutting needle. The extraordinary toughness and thickness of the cornea rendered the insertion of this difficult; and the lens was singularly large in proportion to the eye. This rendered the breaking up of that body by no means easy, and it occupied full a minute. The morning was dark, and the margin of the deep brown iris not distinctly seen, which led to its being wounded in one eye and bleeding freely. The cataracts having been thoroughly destroyed, the bear was drawn again into the den. For some minutes he continued in a state of profound coma, giving scarcely any evidence of life, but gradually recovered, and rising with some difficulty he staggered into his sleeping apartment.

On my going to his den the following morning the door of the dormitory was thrown open, and to my surprise, he came out with his eyes open, faced the light without the slightest inconvenience, and began licking his paws with perfect satisfaction. A dose of Rochelle salts was given to him rather as a matter of precaution than because they were needed, and his recovery was rapid, not one red vessel discolouring the conjunctiva at any time.

Encouraged by this result, a similar operation was performed on the second bear on November 15th. This animal was brought out of the den and secured to the iron rail in front by six men, and was thus more manageable. The dose administered on the first occasion being rather greater than was needed, Dr. Snow this time used chloroform and spirit in equal proportions. The bear not being perfectly insensible when I commenced, there was some difficulty with the left eye, for at each attempt to insert the needle the cornea turned in beneath the membrana nictitans and was quite invisible. At length, by plunging the instrument perpendicularly to the surface, the very tough cornea was penetrated, and the cataract broken up. To obviate such a movement in the right eye, the needle was introduced at the inner and lower margin of the cornea, and the operation easily completed. The recovery of this animal was quite as rapid as the former, and considerable progress has already been made in the absorption of the fragments, which may be expected to occupy a longer time than in the human subject from the great size of the lens.

An interesting series of experiments by Dr. Dieterich proved that the eyes of animals will undergo considerable injury with impunity which is confirmed by these operations. Solution is well borne by them, and neither bandages nor after-treatment are required. Extraction would be highly improper, the cataracts being always soft and yielding readily to the needle. Future operations will be facilitated by attention to the following points: — The pupil should be well dilated by atropine; the needle strong, extremely sharp, and cutting for not less than one-sixth of an inch. The animal should be fully under the influence of chloroform, which is best applied by pouring it into the hollow of a sponge and tying it to the muzzle with a handkerchief. To prevent the eye rolling in, the point of puncture may be at the margin of the lower and inner fourth of the cornea. The operator must be prepared for great toughness of that membrane; and the magnitude of the lens will require free use of the needle.

Berkeley-square, Dec., 1850.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,
Assistant-Surgeon to the Hospital and Demonstrator of Anatomy in the School;
AND
ROBERT BRUDENELL CARTER, Esq.

OBSTRUCTION OF THE INFERIOR VENA CAVA FROM HEPATIC DISEASE.

J. F., aged 23 years, the foreman of a large retail beer and spirit shop at the corner of Long-acre, was admitted into the London Hospital on the 16th of September, 1850, under the care of Dr. Cobb. He complained of pain in the epigastric region, increased by taking food; of nausea and deficient appetite; and of other symptoms of gastric derangement, having also a coated tongue and constipated bowels. His object in applying for admission into the hospital was chiefly to call attention to the state of his abdomen, which was somewhat tumid, and covered with a net-work of distended subcutaneous veins.

He was placed upon a restricted diet, and ordered to take a saline cathartic mixture. Under this treatment he speedily began to amend; his appetite returned, his tongue cleaned, his bowels were freely acted upon, and he soon declared himself to be quite well, notwithstanding that the distension of the abdomen, and the dilatation of its superficial veins, had not at all diminished.

Although there was no visible connexion between these conditions and the symptoms under which he had been labouring, it was thought desirable to discover, if possible, the causes which had produced such a departure from the natural standard; and, with this view, a minute inquiry was made into his past history and present condition, the principal results of which may be stated as follows:—

He is a slight, thin young man, measuring five feet seven inches, with dark hair and eyes, and an intelligent, or almost handsome countenance. His complexion is ex-sanguine, and somewhat sallow, but not in a degree greater than his occupations will account for; and he does not appear to be the subject of any marked diathesis, although decidedly presenting the "lymphatic temperament." His skin, although sallow, has no bilious tinge, and the conjunctivæ are perfectly white.

He is the youngest child of healthy parents, who are now both dead. His mother attained the age of 50; his father, of 58; and he does not know of what diseases they died. He has two brothers and one sister, who resemble him in person, and who have always been in good health. He has been vaccinated, and has undergone the usual diseases of childhood, but has never been the subject of any other illness, except during attacks of dyspepsia, and on one occasion to be mentioned hereafter.

He has been employed at the gin-shop for thirteen years, and five years ago he became foreman,—a promotion which required him to superintend the *whole* of the mixing operations, in which before he had only been accustomed to assist. This branch of his duty obliges him to spend a considerable time, often several hours daily, in a cellar containing large vats of spirit. He is accustomed also to attend at the bar, as salesman, during the evening; and altogether his occupations are very laborious, causing him to rise early in the morning, and to remain until late at night in an atmosphere vitiated by gas and alcohol, whilst he is effectually prevented from taking exercise in the open air. He states that his habits are extremely temperate; that he is accustomed to eat fresh meat three times a day, and that it is his principal article of diet. He eats the lean parts only, as "*fat always disagrees with him;*" and he drinks a pint of "half-and-half" daily, making it a rule never to swallow any kind of spirit.

Functional Examination.—The nervous system is somewhat highly developed, and does not appear to be in any way disturbed. He is intelligent, quick of perception, and his replies to questions are ready and to the purpose. He has never experienced morbid wakefulness, or morning anorexia, or tremor of the hands, or any other symptom of the action of alcohol upon the nervous centres.

The function of respiration exhibits no indications of disorder. He has no cough, no expectoration, no dyspnœa, no uneasy sensations in the chest. He is able quietly and slowly to take a deep breath without pain or inconvenience. In the erect posture, with a pulse of 75, I observed him to respire eighteen times in a minute. About four years ago he had attack of pain in the chest, with cough and some febrile heat. He was treated by medicines, and by a mustard cataplasm to the right side. At the end of a week he was sent into the country for change of air, and returned quite well to his occupation about ten days afterwards.

The circulating system presents evidence of derangement only by the varicose condition of the superficial abdominal and thoracic veins, and these appear almost entirely to balance the internal obstruction which they indicate. The patient states that their dilatation commenced about three months before his admission into the hospital; that it increased during one month, or a little longer; and that since then they have been stationary in their present condition. He is not subject to flushing of the face, or to coldness of the extremities, and he has never suffered from any hæmorrhoidal affection.

The functions of digestion and assimilation are, on the whole, well performed. He prefers lean meat to other articles of diet, and says that he is the subject of occasional "bilious attacks," by which he means that he suffers from headache, anorexia, and nausea, with furred tongue, bitter taste in the mouth, and constipation,—symptoms which are always relieved by a smart mercurial purgative. Attacks of this kind are apt to follow the ingestion of fat, for which in general he has no relish; but they sometimes occur when fat has not been eaten, and the patient has not exercised sufficient observation positively to connect them with other kinds of food. The bowels act daily, when he is in health, without the aid of medicine, and the evacuations are fully coloured by bile.

The genito-urinary system is in all respects healthy. He describes his urine to be usually natural in appearance and quantity; and the specimen examined had an acid re-action, a specific gravity of 1·021, was quite free from deposit, and presented no trace of albumen. He has never contracted any venereal disease.

Physical Examination.—He is of a spare and muscular figure, having a capacious, well-formed chest, and a somewhat prominent abdomen. On each side of the anterior surface of the trunk, extending from the inguinal region to the axilla, is a large distended vein, much raised above the general surface. That on the right side is as large as the barrel of a swan-quill, that on the left being somewhat smaller. Nearer to the linea alba, the epigastric veins are distinctly visible, although not prominent; and these four trunks communicate with a venous net-work, which extends over the upper part of the abdomen, and the whole front of the chest, as high as the top of the sternum; some of the communicating branches being distinctly elevated, while others are only visible as blue lines beneath the skin. In every vein raised above the surface (the patient being in the *erect* posture) the pressure of the finger produces distension *above* the point of temporary obstruction; but, in the *recumbent* posture, (or, under any circumstances, in the veins which are not prominent,) no such effect is visible. There is a net-work of enlarged veins over each hip, and the lower extremities are decidedly turgid with venous blood, although not swollen or œdematous. The back, neck, face, and arms present not the smallest trace of congestion, the lips being rather anæmic than otherwise, and the veins at the elbow scarcely to be seen until pressed upon. Upon the right mammary region, and extending to the axilla, is a large cicatrix, without contraction, the result of a burn inflicted when the patient was three years old.

Percussion and auscultation of the chest discover some condensation of the lower portion of the right lung, over which resonance is diminished, and the respiratory sounds are very feeble. At the infra-mammary region, on the right side, a little mucous rhonchus was indistinctly audible, and over the whole lung there is less respiration than on the left side, where nothing morbid could be detected. The chest measures 36½ inches at the close of expiration, 37 inches at the close of inspiration, and the right side is half an inch larger than the left.

The action of the heart is perfectly healthy in impulse, rhythm, and sound, and the præcordial dulness does not extend beyond its proper limits. No abnormal impulse or bruit is discoverable in any part of the chest. The arterial pulse is firm, equable, and tranquil, and is identical with regard to time, volume, and character, in the two radial and in the two anterior tibial arteries.

The abdomen is visibly, although not excessively distended. Careful percussion affords evidence of some effusion into the peritoneal cavity; and the liver, enlarged and firm, extends considerably below the margin of the ribs, and into the epigastric region, almost reaching to the umbilicus. Its surface is not irregular or nodulated, and there is no indication of disease in any other viscus, or of any morbid growth within the abdominal cavity. R. B. C.

ST. GEORGE'S HOSPITAL.

BY
Dr. BARKER,
AND
HARVEY B. HOLL, M.R.C.S.
Curator of the Museum.

AMAUROSIS CAUSED BY A TUMOUR IN THE LEFT OPTIC THALAMUS: OTHER CEREBRAL SYMPTOMS AT FIRST BUT SLIGHTLY MARKED.

A man, about four and twenty years of age, stout and of rather florid complexion, was admitted under Mr. Hawkins,

May 29th, complaining of pain in the head and greatly impaired vision. He stated, that during the early part of the preceding winter, he had suffered much privation from want of proper nourishment, but that latterly he had obtained employment as a railway labourer, and had lived well; that he had always, however, enjoyed good health until about six weeks or two months previous to his admission, when he became affected with intermittent pain in the head, and soon afterwards his sight became impaired, distant objects appearing indistinct, as though viewed through a haze. These symptoms, he said, had been gradually increasing, until now he was unable to see beyond the distance of a few yards. He had observed, however, that his vision was better on some days than on others, and that it was generally worse in the after part of the day, and when lying down. His gait was unsteady and tottering; his aspect characteristic of his complaint; the eyelids wide open; the eyes directed forwards and staring, but not excessively so. His pupils were slightly dilated, but regular, clear, and black; the action of the iris consentaneous and equal in both eyes, but limited and slow; the catoptical lenticular images distinct; the movements of the eyeballs symmetrical. Impressions from objects within his limited visual distance were slowly received, and the patient gazed at the objects for some seconds before he could distinguish them. He was unable to localise the pain in his head; he suffered occasional attacks of vertigo and tinnitus aurium; his pulse was quick and irritable; his bowels inclined to be costive.

Previous to his admission he had been blistered and leeched. On the 31st Mr. Hawkins ordered 6 oz. of blood to be taken from the temples by cupping, and this was repeated on the 7th of June, each time with relief to the pain in the head; and small doses of calomel, tartarised antimony, and extract of conium, were given thrice in the day.

On the 15th of June the patient's gums became slightly affected by the mercury; the pills were then given less frequently, so as to keep him under gentle mercurial influence, and, on the 24th, a blister was applied to the nape of the neck.

On the 26th and 27th he passed into a state of stupor; seemed disinclined to speak, and his answers to questions were somewhat incoherent. During the 26th he had repeated attacks of giddiness, with loss of consciousness, which lasted for a few seconds and then passed off. His pupils were much dilated; pulse feeble and not accelerated.

On the 28th the stupor had increased almost to coma. He was ordered to lose 6 oz. of blood from the temples by cupping.

He continued in this semi-comatose condition, passing his motions and urine involuntarily until the 11th of July. He was very quiet, never speaking, except to reply to questions which had been repeatedly put to him, and his answers were then somewhat confused and incoherent. His pulse was natural as to frequency, when he was quiet, but irritable, and became greatly accelerated from very slight causes of excitement. On the 8th of July a considerable degree of loss of power was observed in the right arm. Blisters were applied behind the ears, and on the 10th, to the nape of the neck, and an enema of turpentine and castor-oil administered. On the 11th he was decidedly improved. He was much more sensible to external impressions, and ceased to pass his motions and urine involuntarily; his vision, however, was almost extinct, and he could little more than distinguish the situations of the windows.

On the 15th he again passed his motions and urine involuntarily; and, although he was not unconscious, there was remarkable sluggishness of intellect. He dozed much, but his sleep was easily disturbed, and he made but little complaint of pain in the head. There was decided palsy of the right arm, with some diminution of power in the lower extremities, although he could draw them up in bed with tolerable freedom. The pupils were rather less dilated. A blister was again applied to the nape of the neck, and dressed with mercurial ointment.

From this time until his death, which occurred on the 4th of September, some of his symptoms appeared slightly to improve while others slowly increased. His intellect became quicker and he answered questions more readily, but his memory became somewhat impaired, and occasionally he misapplied words; his vision also improved so far that he could distinguish persons and things when quite close to him, but he became progressively more thin and feeble; his left arm became partially palsied, the right arm remaining completely so, and he continued unable to control the evacuation of his rectum and bladder. On the 4th of September he passed rather suddenly into a state of profound coma, and died four hours afterwards. There were no convulsions, and to the last never more than some diminution of power in the lower extremities.

Sectio Cadaveris Sixteen Hours after Death.—Body much emaciated; surface of the arachnoid unusually dry; convolutions of the brain flattened; ventricles much distended and filled with clear serum; veins of the choroid plexus turged with blood. The left optic thalamus was expanded by a tumour developed in its interior. This tumour, a highly vascular encephaloid growth, was about the size of a small apple, somewhat oblong in form, the long diameter being directed from before backwards, and slightly compressed from above downwards. Above, it projected into the cavity of the ventricle; below, it reached nearly to the base of the brain, without making its appearance on the under surface of the encephalon; on the outer side, it had pushed the lenia semicircularis and corpus striatum forwards and outwards; on the inner side it had displaced the fornix and septum lucidum towards the opposite side, and compressed the right optic thalamus; behind, it separated the fibres of the crus cerebri of the left side. The substance of the brain appeared healthy throughout; the optic nerves and tracts, and the structures on the under surface of the brain presented nothing remarkable; the cerebellum was also healthy. The lungs were much congested; other viscera natural.

The situation of the tumour behind the commissure of the optic nerves sufficiently explains the double character of the amaurosis; but it is somewhat remarkable, that the loss of power in the lower extremities was so much less considerable than it was in the arms, as the tumour, from its position, must have greatly disturbed the fibres of communication between the left hemisphere of the brain and the medulla oblongata. The unsteadiness of the patient's gait, at the time of admission, together with the occasional attacks of vertigo and tinnitis aurium, led to an opinion that the cause of the disease was seated within the cranium, which was rendered the more probable by the total absence of any direct symptoms of intrinsic disease of the eye. The latter circumstance was not, however, of much value as a diagnostic sign, as it is generally admitted, though denied by Mackenzie, that amaurosis may be caused by mere functional disturbance of the organ of vision; and but little assistance was afforded by the pain in the head, this being of frequent occurrence in forms of the disease in which the extra-cranial portion of the optic apparatus is alone in fault. At a subsequent period, when other cerebral symptoms became added, the diagnosis was confirmed. The semi-comatose condition into which the patient passed, at the end of the fourth week after his admission, was probably dependent upon an effusion of serum into the ventricles of the brain, which subsided after a time, by virtue of the remedies employed, to return again in the last hours of life.

In Mr. Hawkins's private museum, now at St. George's Hospital, there is a preparation of a tumour from the posterior lobe of the left hemisphere of the brain, which produced amaurosis, unaccompanied for many months by any other cerebral symptom. The patient was a man twenty-six years of age, and, at the time of his admission, September, 1842, his sight had been failing him for about twelve months, but had become worse within six weeks. Both eyes were affected, but the loss of sight was greatest in the left eye: eventually he became totally blind. In November he began to have violent paroxysms of pain in the head, at first referred to the forehead but subsequently to the occiput; in December, the attacks began to be accompanied by vomiting; in February, loss of memory; and on March 10th, his last attack was attended by great faintness. The next day he died comatose.

The convolutions of the brain were flattened; the lateral ventricles contained a considerable quantity of fluid, which, distending the descending cornua, appeared to have caused the protrusion of the cerebral substance at the base of the brain, immediately on the outer side of the optic tracts, and presented the resemblance to small tumours compressing the

tracts. The posterior lobe of the left hemisphere of the brain was much larger and firmer than natural, and, on cutting into it, a tumour the size of a large egg was found occupying its centre, which compressed the left lateral ventricle and pushed it over towards the right side. This tumour was harder and darker in colour than the rest of the brain, and contained numerous small cysts. The cerebellum was healthy.

It is vain to attempt an explanation of the manner in which this tumour produced the amaurosis. Dr. Abercrombie, in commenting on the cases which he collected in his work on diseases of the brain, observes "that tumours in the same situation and of no larger size were accompanied by blindness, convulsions, or paralysis," and "it does not appear that these deviations depend either upon the size of the tumour, or, as far as we know at present, upon their particular structure." His 91st case presents some points of resemblance to that last narrated. A cyst containing ʒii of fluid, occupied the centre of the posterior lobe of the left hemisphere of the brain; the symptoms were paroxysmal pain in the head, amaurosis, and subsequently loss of speech and impaired intellect; but in the appendix to the work, he quotes a case from Bouillaud, in which nearly similar symptoms existed in connexion with a tumour not larger than a nut, which was situated in the anterior part of the hemisphere. Bouillaud also met with a case in which a tumour the size of an egg, occupying the same position as the last, produced partial hemiplegia of the opposite side, with impaired utterance and weakness of intellect, but no disturbance of vision.

The pathological museum of the hospital also contains a preparation of malignant disease of the base of the brain, which, in connexion with the present subject, is not without interest. It was taken from a girl aged 16, who was admitted under Mr. Babbington in 1841. The left eye was affected with fungus hæmatodes; the tumour projected beyond the lids; the glands before the ear and under the jaw were enlarged. The disease had commenced about four years before, and had since continued to progress slowly; the glands had been implicated about three months. Her general health was good. Mr. Babbington removed the eye. The portion of the optic nerve which remained after the operation appeared quite healthy. In the ensuing month the patient was discharged relieved. In April, 1842, she returned, complaining of pain in the head and impaired vision in the right eye. These symptoms increased daily, until her sight was totally extinct, added to which her stomach became affected with sickness after meals. The glands about the neck and ear increased in size, and a fungoid growth sprouted from the bottom of the left orbit. She died in the following June, having suffered constant severe pain in the head, and incessant vomiting. After death a tumour of medullary nature, and very soft, was found occupying the middle part of the base of the brain, extending from the back part of the anterior lobes to the fore part of the pons varolii. The growth was intimately connected with the left optic nerve. The right optic nerve was very much displaced, and is seen in the preparation running down the side of the tumour to the crus cerebri. The membranes of the brain were much congested; the ventricles contained a small quantity of fluid. The portion of the optic nerve remaining in the orbit was quite soft, and converted into a small medullary tumour, which was adherent to the inner part of the upper eyelid. The structure of the diseased gland was soft and medullary; viscera healthy.

The disease in these cases generally commences in the optic nerve, and within the eye; but, unfortunately, the extirpation of the globe, except when performed at a very early period, has not been attended with very fortunate results. I am unacquainted with the reasons which led Mr. Babbington to operate in this instance.

Although, as in the last case, malignant disease sometimes extends from the exterior of the cranium to the brain, it is rarely that we see secondary malignant growths developed in the other cavities of the body consecutive to similar disease seated within the cranium, though many months may have elapsed between the first appearance of the symptoms and the death of the patient. Equally rare, I believe, is it for the brain to become the seat of secondary malignant disease, except by contiguity of structure. I have seen, however, one case,—a man who died in the hospital about twelve months ago of meningitis,—which there was every reason to consider of this description. The right kidney contained an encephaloid tumour the size of an orange; the left kidney a smaller one, and in the substance of the right optic thalamus there was a tumour the size of a large pea of a similar nature.

I am indebted to Dr. Barclay for the history of a very remarkable case which occurred under the care of one of the physicians in the early part of the present year. A tumour was found attached to the dura mater, immediately beneath the commissure of the optic nerves, but it did not produce any disturbance of vision, the patient's life having been cut off by a similar growth in another situation, while it was still of small size. The patient, a woman, aged 44, was admitted, under Dr. Page, Dec. 19, 1849, with partial loss of power in both arms and legs. She stated that she had, in the first instance, had a fit of some sort, accompanied by unconsciousness, which lasted several hours, and left her palsied on the left side, but that she had partially recovered the use of it in about seven or eight months, and that it was then of more service to her than the right, which had been gradually failing her for two or three months past, so that she was then unable to walk or stand without support, or even feed herself. The chief peculiarity in her condition was, that in lying in bed there was no muscle which did not contract more or less in obedience to the will, and there was no loss of sensation anywhere, although she said her whole body felt numb. In speaking the inspirations were slow, interrupting her sentences; but she articulated distinctly. In moving her hand and arm, they did not drop powerless by her side, but it rather seemed that an effort of will was wanting to produce perfect movement. The right hand was contracted, and resisted, in some degree, any attempt to open it; and she could draw her legs fully up in bed, but, when desired to do so, said she must wait a little before she could succeed; and, after continuing the effort for some time, would say, "Now they're coming;" and first one and then the other slowly moved up. Her bowels acted regularly; her urine was passed naturally; her tongue was clean, and her appetite pretty good. On the 22nd, she passed one motion under her in bed, but with this exception she remained in the same condition, suffering no pain, until January 5. She then became unable to empty her bladder, and her urine was obliged to be drawn off by the catheter. There was now evidently less general power, and she lay on her back utterly helpless. On the evening of the 7th, on awaking after a short sleep, she complained of great faintness. She gradually sank through the night, and died at an early hour on the following morning. Attached to the right side of the falx cerebri, at its anterior part, was a highly vascular encephaloid tumour, about the size of a cob-nut, which slightly indented the inner surface of the corresponding anterior lobe of the brain. A similar but smaller tumour, of rather flattened figure, was attached to the dura mater, covering the front part of the olivary process of the sphenoid bone, which slightly raised the optic commissure. A third tumour, very globular, and about an inch-and-a-half in diameter, was situated on the right side of the margin of the foramen magnum, immediately within the cranium; it resembled the former in character, and was invested by a delicate membrane, the outer layer of the arachnoid. It displaced the medulla oblongata and commencement of the spinal chord to the right side, and indented the under surface of the right hemisphere of the cerebellum, but did not soften or otherwise alter its structure. The seventh and eighth nerves wound round the tumour without being adherent or implicated in it. A fourth tumour, a little larger than a bean, was attached to the dura mater on the opposite margin of the foramen magnum, immediately above the anterior condyloid foramen. The space left for the transmission of the upper part of the spinal chord would scarcely admit the passage of the little finger. In other respects the brain and its membrane presented a healthy appearance. No other organ or structure was affected with malignant disease.

The only case at all analogous to the one just described with which I am acquainted, is noticed by Dr. Latham in the *Medical and Physiological Journal* for July, 1826, where a tumour growing from the cerebellum extended along the spinal canal as far as the origin of the sixth cervical nerves. The symptoms in the early part of this case were pain in the head, unsteady gait, and hysterical symptoms. The symptoms in Dr. Page's case had also something of a hysterical character.

WESTMINSTER HOSPITAL.

By JOHN L. MILTON, Esq. M.R.C.S.L.

LUPUS.

The fearful deformity and protracted suffering occasioned by lupus, and the intractable nature of the malady itself, render everything connected with it interesting. The patient whose history is subjoined is a woman, 37 years old; she began to suffer from this disease ten years ago. From her account, it appears that it then made its appearance in the form of boils, which rapidly degenerated into open sores, spreading steadily, healing with great difficulty, and always attended with severe pain. For this she placed herself under the care of Mr. Arnott, who prescribed some strong escharotic lotion, if we may decide upon its nature from her description of its effects and the pain it occasioned. The relief produced by this was well marked, but the healing process was still slow. Eventually, however, the sores healed up, leaving behind them firm scars and indelible deformity.

From that time up to the date of the present attack she had no return of her complaint; three months ago, however, she was attacked by a shooting pain in her hip, and, placing her hand on the part, she discovered a swelling underneath the skin, which gradually became bright red and shining, and then assumed a purple hue. A severe burning pain also slowly made itself felt at this spot; her health began to suffer, and her appetite gave way. Finding the symptoms steadily getting worse, she applied at the hospital, and was admitted, under Mr. Lynn, August 13th. At this time there was a large mass in the subcutaneous cellular tissue, as big as a duck's egg, of a livid colour, and apparently composed of two or three lupus deposits placed close to each other.

Her bowels having been cleared out, she was put on full diet, to which a little brandy was added; the antacids were then employed, and her bowels gently purged from time to time. On the 27th, the mist. iodin. was commenced, and followed by such marked benefit, that she considers the first dose did her good; and it was accordingly continued regularly. The potassa fusa was, some days after, applied to two points of the lump, for the purpose of destroying partially the diseased skin, and exciting a healthy action in the parts below. This effect it certainly appears to have had, for a portion of healthier skin appears between the two spots touched by the potassa fusa, and there is a marked change for the better in the features of the case, the termination of which we hope to be able shortly to subjoin.

PHAGEDÆNIC CHANCRE.

The complete success of the simple and efficacious treatment pursued in this case by Mr. Holt, will, it is hoped, not be without interest. It may be said that, notwithstanding the unparalleled diligence with which syphilis has been studied, some cases of phagedæna still remain a problem, both as to their cause and treatment. The older writers, baffled by an ulcer which they were obliged to recognise as venereal, and yet could not cure by mercury, show us in what a sea of doubts they were tossed respecting what they called some anomalous form of chancre. Nor are the diagnosis and treatment so clear as might be wished for. Under the name of phagedæna are given a superficial ulcer, spreading sometimes very slowly, and excessively apt to retrograde; a chancre rapidly destructive, both in depth and breadth, attended with great constitutional disturbance, as headache, chills, &c.; a chancre on the glans, without hardness, gnawing it away, growing worse under mercury, and yielding to opium; and, finally, a violent form of chancre, rapidly destructive, but amenable to mercury.

Nor is the treatment, at times, much more satisfactory. Only a very short time ago, it was proposed, as a last resource, to amputate the penis in a case of this kind. Every remedy has failed except change of air; and in some instances the relentless march of the disease has only stopped after the greater part of the penis had been destroyed. Even under the most active treatment, the glans has been separated from its attachments to the penis; the urethra has been perforated, occasioning infiltration of urine, and subsequent sloughing, and the skin of the penis has been eaten away to the pubis, or the whole organ has been lost.

The cause of this extraordinary virulence is a mystery, and an explanation of it has been sought for in a vitiated state of the system, or in some inexplicable disposition to take on low malignant action. Benjamin Bell noticed that cases of this kind appeared at times in far greater number than at others. "Once," he says, "I saw more cases of this kind in three or four months than I had seen for years, and four of them had arisen from infection communicated by the same woman." For such reasons, Mr. Holt deemed the leading features of the following case worthy of attention:—

The patient, aged 22, a carpenter by trade, living in Eaton-street, Vauxhall, always considered one of the most unhealthy parts of that neighbourhood, was admitted, July 12, into the Mark ward, for phagedænic ulceration of the penis, of which he gave the following account. Some weeks previous to admission he had a suspicious connexion, immediately after which he washed the penis with cold water. He had had connexion immediately preceding this, but with a healthy woman. About two or three weeks after, he remarked a suspicious yellow spot on the under side of the frænum, unaccompanied by pain or itching. He paid little attention to it, and lived much as usual, eating meat, taking two or three pints of porter a day, and living on the whole rather freely, as in fact he has always done of late years, though he has never been dissipated. He worked on, and was recommended by one of his fellow-workmen to get black-wash, and take salts and senna. Under this the pain began to get very severe, when he was walking about and at work, while the sore increased in size. After enduring this ten days, he went to a surgeon, who gave him also black-wash and some pills, which purged him, but not very severely; they tasted very like liquorice, and were probably extract of sarsaparilla with mercury. The sore, however, went on increasing in size, and some medicine was given him, which had no better effect; and it is difficult to say to what extent the ravages of the disease might have been carried but for the following accident. On the morning of the day he was admitted he stooped to pick up a chisel, and, on rising with it in his hand, being faint and weak, probably from the long-continued deleterious action of a sore on his system, and the effects of the medicine, he staggered and fell, and a portion of the fore-skin, which had been loosened by ulceration, and hung down, came in contact with the edge of the chisel, and was cut severely; this induced him to come to the hospital to have it dressed, and the state he was in procured his immediate admission as in-patient.

The sore was at this time as large as a half-crown, and extended from about one-third along the glans to near the root of the penis, which it completely encircled. The skin was eaten away, as was a portion of the glans, and the corpora cavernosa were laid bare; and, the ulceration being deep as well as extensive, his health had begun to suffer, and for some days before admission he had been able to take nothing but a few biscuits and a little tea. But, whatever medicines had been given him, mercury does not seem to have been extensively used, as his mouth was not sore.

He was immediately ordered ʒss. of liquor opii in ʒj. of camphor mixture; beef-tea and wine were allowed him, and the next day the opiate was repeated twice in a smaller dose. He was then put on a decoction of sarsaparilla and dilute nitric acid, and then, a day's rest having intervened, the nitric acid was applied to the sore, and an aperient draught was prescribed; after which the treatment was confined to nourishing diet and nitric acid, with sarsaparilla.

The good effects of this treatment were soon visible; the sore began to fill up from the bottom, a level bed of minute granulations and healthy pus began to take the place of the rugged sanious surface. In a short time a narrow strip of bluish skin showed that advances were gained upon the ulcerating surface, and, at the present time, he is rapidly progressing towards complete cure. The posterior edge of the glans is lost, and will not be replaced, but the deformity from the loss of skin seems undergoing modification by a process similar to that commented on in a previous number, (*Med. Times*, August, 10, 1850,) by which the scrotum covers the testicles; for, from the root of the penis onwards, the skin appears to be slowly advancing over the corpora cavernosa, as if, in course of time, it would re-cover them. His health and strength improve every day, and there is every probability of his soon being discharged cured.

The cause of the destructive nature of this chancre could scarcely be with fairness ascribed to the patient himself. There seem no well marked symptoms of a scrofulous or phthisical taint in him, nor, though weak and pale at first, does he appear of an unhealthy organization. None of hi

brothers or sisters have ever suffered from phthisis or scrofula. The neighbourhood where he lives is unhealthy; but, if this could be the cause of phagedæna, thousands must suffer from it as well as he; and the same might be said of his general habits. To what, then, are we to attribute the violence of this ulceration, which, but for the timely check it received at the hands of Mr. Holt, would soon have destroyed the greater part of the penis.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

QUEEN'S HOSPITAL, BIRMINGHAM.

Cases admitted under LANGSTON PARKER, Esq.,

Professor of Anatomy at Queen's College, Birmingham, Surgeon to the Queen's Hospital, &c.

M. J. MOORE, Esq., House-Surgeon.

SCIRRHOUS TUMOURS.

The danger of a scirrhous tumour returning after the operation for its removal is always very great, yet we are not justified in asserting that scirrhus and cancer are absolutely incurable. Cooper in his work states, that a woman lived to the good old age of 80 after the spontaneous sloughing of a scirrhous tumour; and I am acquainted with a lady living many years after removal of a similar growth. As, however, it is undoubtedly a constitutional disease, its recurrence will take place in the same or other parts in the greater number of cases. But as there is a chance of non-return, it seems proper, *cæteris paribus*, that the patient should have the benefit of it. Mr. Parker had lately occasion to operate on a tumour of this kind, of which the following is an account:—Esther Davies, aged 60, married, without family. Some four years back she observed a small tumour about the size of a marble on the right side of the right breast; this has gradually got larger, and is now about the size of a swan's egg, the integument over it being red and shining. She has never had any continued pain in it; it feels very hard. There is no cancerous cachexia, and her general health is good. There is no affection of the glands of the axilla, and the tumour is tolerably movable. As no other treatment seemed likely to have any effect, it was decided to remove it; and the operation was accordingly performed on October 4th by Mr. Langston Parker. About two inches of integument were necessarily taken away, and the edge of the pectoralis major was exposed. It was then found the growth extended some distance beneath this muscle; and, in the necessary dissection, the long thoracic was divided, and required ligature. Two other small arteries also required ligatures. The parts were then brought together by adhesive plaster, and the patient put to bed. On examination of the tumour, it was found to be a well-marked specimen of scirrhus, both as regarded its general and microscopical characteristics. The patient went on well without a single bad symptom, and the wound rapidly healed. The ligatures, however, did not come away for some time,—not till November 16th. She finally left the hospital November 20th, stating that she felt as well as ever she did in her life. This patient would seem to stand as good a chance of permanent cure as possible, but the result is necessarily doubtful. As, however, ulceration would without doubt have taken place before this, she is certainly now in a better state than she could possibly be with an open cancer.

The difficulty of diagnosing between malignant and other tumours is sometimes very great, and, indeed, it is not to be wondered at when the fact that other tumours will occasionally degenerate is taken into consideration. Mr. Parker some time ago removed a tumour, concerning the exact nature of which some doubt was felt before the operation.

Eliza Hateley, aged 33, married, but without family, states that two years back she observed a small tumour about the size of a nut, on the right side of the right breast, between it and the axilla. It was now about the size of a hen's egg, hard to the feel, and perfectly movable; there were several enlarged glands around it. She stated she often had acute lancinating pain, both in the tumour and extending down the arm, and her countenance betrayed evident signs of serious disturbance of the general health. She had been leeched, blistered, and used iodine ointments, &c., but without any benefit, and she now much wished the growth to be removed. She was accordingly put on a preparatory course of medicine, with a view to her general improvement.

Mr. Parker removed the tumour, making only one incision, the finger easily passing behind through the dense cellular tissue surrounding it. No artery required ligature, and the opening was closed by means of three pins and twisted suture. The upper part healed on the first intention, and the long part, after discharging a small quantity of pus, brought on by a slight accidental attack of erysipelas, also became sound. Having taken a quinine mixture during the last week, she was discharged July 5th. The enlarged glands in the neighbourhood have since remained much the same in size, certainly no larger, and no fresh ones have appeared. The general health is now comparatively good, and the only complaint she makes is of occasional pain in the arm. On examination of the tumour, it showed no malignant characteristics, and evidently belonged to the class of glandular sarcomatous growths. She certainly is safer from malignant disease than she would have been had not an operation been performed, although a great authority, Dr. Walshe, is of opinion that a really malignant growth is seldom deposited in a fibrous tumour.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, December 14.—		Medical Society of London. *Subject*:—Mr. H. Haynes Walton on the Removal of Diseased Bone in Certain Cases of Morbus Coxarius. Eight o'Clock.
——	——	Guy's Hospital Physical Society. Eight o'Clock.
Monday,	December 16.—	Statistical Society of London. *Subject*:—J. T. Danson, Esq., on the Precious Metals. Eight o'Clock.
Tuesday,	December 17.—	Linnæan Society of London. Eight o'Clock.
——	——	Pathological Society of London. Seven o'Clock.
Wednesday,	December 18.—	Geological Society of London. Half-past Eight o'Clock.
Thursday,	December 19.—	Harveian Society. Eight o'Clock.
Saturday,	December 21.—	Medical Society of London. *Subject*:—Dr. E. Lee, on Functional Paralysis. Eight o'Clock.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 14.

SELF-SUPPORTING DISPENSARIES.

Our readers may have perceived a notice in our journal, that Sir Benjamin Brodie had subscribed 10*l.* to the funds of a Self-Supporting Dispensary—an evidence that a perception of the necessity of a systematic ministration of medical aid to [the indigent and laborious classes was extending

among the higher grades of our Profession. We are not surprised that a man in the position of Sir Benjamin Brodie should make an offering on the altar of charity of a portion of the rewards which public gratitude has heaped upon him; and we should not be surprised, moreover, if other professional men of his rank, or aspiring to it, and who already render gratuitous services to our public hospitals and charitable institutions, should be found foremost in the advocacy and support of Self-Supporting Dispensaries.

It is still doubtful, however, to what extent the maintenance of these institutions is compatible with the interests of the great body of surgeons in general practice. While we entirely sever ourselves from the undiscriminating prejudices which prevail, and deprecate the insensate violence which has been fulminated against these institutions, we see some difficulties in the way of their establishment upon a plan that will make them acceptable to the bulk of our hard-working and ill-paid brethren. It is to be feared lest, in some districts, they should create a new element of competition, and tend to introduce jealousy between the official and the private practitioner. The latter struggling with manly resolution, to obtain a livelihood against a host of obstacles and trials, would feel his lot embittered the more by the withdrawal from the sphere of his labours of a certain number of patients who were attracted by the seductive advantages offered by a self-supporting institution. This result should, if possible, be avoided. Such societies, originally established with a view to benefit the public, should also be made productive of benefit to the Profession, —and not merely to two or three members of it, but, if possible, to the entire body.

Whenever, therefore, it is contemplated to establish such an institution, it should be the object of the projectors to acquire for it as much support as possible among the General Practitioners in the neighbourhood; and this object might be effected by permitting the member to employ his ordinary medical attendant, if willing, or such other as he might select, from among the gentlemen practising within the limits of the district. This, indeed, is part of Mr. Smith's plan, and if fully developed, and made a fundamental feature, would obviate many of the objections which have been urged against these institutions.

The medical men of the district might also be invited to become members of the Board, so that a vigilant eye being kept upon the management, abuses would not be suffered to take root, to the prejudice of the private practitioner. Up to this time we have not seen any plan calculated to engage our unqualified confidence; but inasmuch as, in spite of the opposition that has been directed against these Societies, they are rapidly, under the energetic auspices of Mr. Smith, of Southam, spreading over the country, we think it a wiser policy to consider fully the effects they are calculated to produce, than to content ourselves with a summary denial of the possible good they may effect. With this view we again bring the matter under the notice of the Profession, and hope that, if any of our readers have considered the subject, and are prepared to develope the method by which these institutions may be made most acceptable to professional feeling and interest, they will communicate it to us, and it shall receive our best consideration. It is not to cure an evil to condemn it. Summary judgment is not always just or wise; and in this instance we believe that a sober and careful consideration of the evils to be removed, and of the good to be effected, will more advance the interests of the Profession, than undiscerning and peremptory condemnation.

THE LONDON AND EDINBURGH MEDICAL JOURNALS.

There is something in sheer stupid humbug that irresistibly attracts attention. The more extreme the amount of ignorance, and the wider its distance from truth, so much the more does it excite a smile, and cause amusement. Let our readers turn to the December number of the *Edinburgh Monthly Journal of Medical Science*, (p. 530.) In a review of the works of Messrs. Paget, Wharton Jones, and Simon, the following remarkable passage occurs:—"Whether it" *(i.e.*, injustice to the labours of the Edinburgh pathologists by the London teachers) "arises from the incessant demands of the "three weekly London Journals, for any kind of hurried "compilations that will fill their pages(a)—whether the high "tone that should ever characterise the lovers of truth is "weakened by the commercial spirit of so vast a metro-"polis—or whether the custom of teaching there as a mere "means to practice, leads to the imposition on the unlearned "of a temporary appearance of originality at the expense "of a permanent reputation, it is difficult to deter-"mine." Perhaps our provincial friend who wrote these words would like to see the library table of a London editor. If he really believes what he has written, — which we very much doubt, — the number of communications daily accumulating there would excite in him the same surprise that old ladies experience at the daily appearance of such gigantic journals as the *Times*, the *Daily News*, or the *Chronicle*. If he will quit, for a brief space, the retirement of Edinburgh, and come into the busy world, we shall be happy to show him it is not want of material that keeps the medical journals down to their present small number.

The article in question gravely informs us that the opinions of the three above-named gentlemen were enunciated long ago in Edinburgh. Of course! Who doubted it? When was it otherwise? We recommend Messrs. Paget and Simon to get some covers struck off for their next works, and headed, in anticipation, "From Edinburgh."

It arises, we presume, from exposure to the infection of the commercial spirit of London untruthfulness, during a brief "incumbency at University College," that Mr. Syme has published certain statements contained in the first article of the December number of the *Monthly Journal*, "On the Comparative Expediency of Lithotomy and Lithotrity," with reference to the use of chloroform! Here we have from the pen of the *soi-disant* only "pure surgeon in Scotland" a repetition of the impudent myth respecting the impurity of the chloroform manufactured in London. We are then told how a patient thought 12,000 miles not too far to travel that he might put himself under the care of this distinguished practitioner; and how a "respectable citizen of Edinburgh wore a smiling countenance, indicative of tranquillity and confidence, without any apprehension of danger or anticipation of suffering, on the morning fixed for the operation of lithotomy." Then comes a savage slap at poor Liston, whom Mr. Syme has seen "operate with a fatal result twice in the same day." The fact of fatal cases *ever* occurring is referred to want of skill in the selection of cases, or in the mode of operation; and then we have "the *dénouement*," viz., that Mr. Syme is the man, and the only man, who has so perfected lithotomy, and reduced it to such precise principles of execution, as to render its performance nearly, if not entirely free from danger.

Some obscure directions about operating, in which "what's

(a) We should like to know under what head the writer of this passage would place the review of Abraham Toulmin's advertisement (pp. 536—546,) which appears in the same number with his own effusion.

true is not new, and what's new is not true,"' complete an article as much like one of Holloway's puffs as we ever read.

We have to express our extreme surprise at Mr. Syme's confession, that he has only lately ventured to administer chloroform to adults about to undergo the operation of lithotomy. We earnestly recommend him, before again subjecting so many patients to needless pain, to open his eyes and see what is going on in London. He should study for a time under his distinguished countryman, Mr. Fergusson, of King's College Hospital, in whom he may see high surgical attainments combined with modesty.

And so for the present adieu to Mr. Syme:—

"When next John Gilpin rides abroad,
May we be there to see."

Till then we leave him to the tender mercies of Mr. Gay, who no doubt is able to defend his pure surgery from the impure attacks of the only pure—the real Simon—of Scotland.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Reports on the Origin and Progress of Pestilential Cholera in the West-Yorkshire Lunatic Asylum, during the Autumn of 1849, *and on the Previous State of the Institution.* By Thomas Giordani Wright, M.D., Visiting Physician to the Asylum, &c. London: 1850.

In the autumn of 1849, the epidemic cholera broke out in the County Lunatic Asylum at Wakefield, and was the cause of great mortality among the inmates. During the twelve months which preceded this visitation, there had been a great increase in the usual number of deaths from ordinary causes in the institution. The author of the present work has undertaken to investigate the extent and the causes of this increased mortality from ordinary causes, as well as the mode of origin, propagation, and other circumstances connected with the visitation of the cholera. The inquiry is altogether statistical. It has been conducted with great labour and intelligence, and deserves to be carefully studied by every member of the Profession, and more especially by those who have any share in the conduct of establishments for the insane. The extent and the causes of the mortality from ordinary causes, from the first opening of the asylum, are carefully inquired into. The following are the principal results obtained:—

1. Within twelve months after the asylum was opened, in 1818, when many cases of old standing disease were first collected within its walls, the mortality was greater than (with one exception) in any subsequent year—20 per cent.

2. During the five succeeding years, when recent cases had ready access to the asylum, the mortality was reduced to 11 per cent.

3. In the following year, 1825, epidemic dysentery began to prevail fatally in the asylum, increasing its mortality in that year to the highest ratio, 22 per cent., and continuing, with other causes apparently connected with the drainage, ventilation, and diet of the institution, to keep up a high rate of mortality during many succeeding years.

4. Since 1825, by improved drainage and ventilation, and increased care in the management and diet of the patients, the mortality has gradually decreased through quinquennial periods, till it reached one-half its previous annual amount, viz., from 18 to 9 per cent.

5. In the course of these periods successive enlargements of the building had been made, to provide for the increasing demands for admission, which had not any perceptible effect on the rate of mortality prior to the erection of a new asylum.

6. In the years 1845 to 1848, the applications for admission were more numerous than could be received, the accumulation amounting, when the new asylum was opened, to more than 200 patients, many of whom had been waiting some years for admission.

7. During the period when the admissions were least numerous, the rate of mortality was the lowest, being, in 1846, not more than 8·6 per cent. of the numbers resident; and for the six-and-a-half years preceding the Midsummer of 1848, 11·4 per cent.; of which 4 per cent. were deaths of recent cases, and 7·4 per cent. those of patients that had been more than twelve months in the institution.

In the year 1848, the mortality was 15 per cent., and in 1849 it rose to 20 per cent., exclusive of cholera; or, including the victims of cholera, to 37 per cent.

The condition of the asylum was in all respects the same as to diet, ventilation, and management, as in previous years; the same under which the mortality had for so many years been diminishing; the same as in the preceding three years, when only 9 per cent. per annum of its inmates had died; *and the only element of difference was, the influx of new patients during the latter nine months of* 1848, *and the three quarters of* 1849; *a larger proportion of whom had been waiting for a protracted period, were worn out by delay and disease, and came into the asylum only to peacefully end their days.*

The agency of this cause is proved by the fact, that, "after Midsummer, 1848, while an unprecedented influx of 435 new patients were received into the asylum, the mortality among the older cases remained nearly the same as in the previous years,—7·6 per cent.; but, among the recently admitted, the mortality rose from 4 to 11 per cent."

Prior to 1848 the increase of the inmates of the asylum was not uniformly marked by a corresponding increase of mortality, either in proportion to the numbers admitted, or the numbers resident. The increased mortality appears to have occurred chiefly when the influx of patients included many who had been waiting long for admission, whose cases were consequently not very recent, and who had probably been enfeebled by long suffering and the privations incident to their condition.

It appears, therefore, that in an earlier period of the history of the asylum, the high mortality depended upon causes capable of being removed. The principal cause of death at this time was dysentery.

The recent increase of mortality, prior to the advent of the cholera, proceeded from causes unconnected with the salubrity of the institution, or with the medical or domestic management of the inmates. These conclusions appear to be clearly borne out by the numerous and elaborate statistical tables compiled by Dr. Wright, and they must prove equally gratifying to the medical officers, and to the visiting justices and others interested in the welfare of the patients.

Dr. Wright has founded upon these facts a suggestion which we think is well deserving of the attention of the medical officers of such establishments generally, viz., "that it is highly desirable to place most of the patients recently admitted on full diet, with daily rations of animal food; and to continue this extra diet so long as feebleness of constitution is apparent."

Causes of Death.—In the last eight months of the period comprised in the inquiry, the causes of death were as follows:—

1. Exhaustion, general paralysis, and old age, 44·7 per cent.
2. Epilepsy, apoplexy, and diseases of the brain, 15·2 per cent.
3. Phthisis and diseases of the lungs, 13·4 per cent.
4. Diseases of the heart, 3·0 per cent.
5. Diarrhœa, dysentery, cholera, 11·5 per cent.
6. Miscellaneous causes (including typhus, rheumatism, erysipelas, scrofulous and cancerous disease, and accidental deaths,) 10·9 per cent.

These causes of death were observed in about the same ratio in the persons dying in the eighteen months just indicated, and in those dying during the preceding six years and a half.

It is interesting to compare the results obtained by Dr. Wright respecting the subjects and the causes of the excess of mortality in the Wakefield Asylum, with the corresponding observations of Dr. Baly upon prisoners.(a) In both classes of persons the mortality considerably exceeds that of the general population beyond the walls of the establishments. This excess of mortality, in the case of the insane, is due in great measure to the fact, that they are in reality diseased persons—the subjects of debility when free from structural disease—and, in the case of paupers, exposed to many more privations than sane persons. Lunatic asylums and prisons are alike exposed to visitations of certain epidemic diseases, especially dysentery, arising from defects in ventilation,

(a) On the Mortality in Prisons, and the Diseases most frequently Fatal to Prisoners. By W. Baly, M.D.—Medico-Chirurgical Transactions of London. Vol. 28.

draining, diet, and insalubrious local influences. These causes, of late years, have been very much diminished, in consequence of our increasing knowledge and attention to them, and, both in prisons and asylums, with correspondingly happy results.

At first sight, the influence of protracted confinement appears to be different in prisons and in asylums. Dr. Wright found the highest mortality to occur in lunatics during the first year after their admission. Dr. Baly found, among convict prisoners, that the mortality increased regularly, as the duration of the imprisonment increased; at least up to the end of the third or fourth year. So far, the difference is no more than might be looked for, and is easily explained. The excessive mortality among lunatics occurred chiefly when the patients had been waiting long for admission; when the old, and feeble, and worn out had accumulated, and the principal cause of death was exhaustion, from old age and privations. The prisoners, on the other hand, as a class, are young persons in the vigour of life, and in good health when entering upon their confinement. Their excess of mortality arose from tubercular disease, was clearly the consequence of the prison influences, and would require time for its full development. If Dr. Baly's opinions respecting the causes of the tubercular disease, which he has proved to be engendered in prisons, be correct, then there ought to be found in asylums an excess of mortality above that of the surrounding population, corresponding to and depending upon the same forms of disease as that which is observed among prisoners. Dr. Baly enumerates five principal causes of the tubercular diseases of prisoners;—a temperature habitually too low; want of proper exercise; depression of mind; a comparatively poor diet; and comparatively impure air. Now these influences, upon the whole, are as much in operation in pauper lunatic asylums as in prisons; and it is a subject well worthy of investigation, and one which we would, therefore, recommend to the attention of Dr. Wright and others who have the requisite opportunities, whether the development of tubercular disease be not one of the causes of the relatively high mortality in asylums, and one the effects of which increase in proportion to the length of confinement, at least between the end of the first and the commencement of the fifth or sixth year of residence. The prominent place occupied by phthisis among the causes of death enumerated by Dr. Wright, gives considerable support to the suggestion we have now offered.

Some details are given by Dr. Wright respecting the results of the treatment of the insane, from which it appears that the proportion of the recoveries to the admissions is at least as great in the Wakefield Asylum as in any institution where a similar class of patients is received.

The number of patients at one time under *medicinal* treatment is briefly adverted to. Out of about 600 residents, including probably 90 curable patients, about half a dozen only are commonly under medicinal treatment. This fact will doubtless surprise those persons, whether within or without the Profession, who think that the art of medicine consists almost exclusively in the administration of physic. Diet, exercise, amusement, control, and the removal of all causes of excitement, are the means chiefly depended upon—with what success is sufficiently attested by the proportion of recoveries as compared with those in other institutions.

Dr. Wright next addresses himself to the investigation of the circumstances attending the rise and progress of the epidemic cholera in the asylum during the autumn of 1849. He begins by stating, that under the term *cholera* he classes those cases only in which there was *collapse with a livid skin;* cases of vomiting and purging, but without *collapse*, are excluded; cases of *livid collapse*, whether accompanied by purging or not, are included. It is very necessary to keep this definition in mind in estimating the amount of mortality. Great differences in the recorded mortality by various observers are no doubt to be ascribed to the absence, in many instances, of a similar precaution.

A series of tables next follows, in which are minutely recorded the following particulars:—The number of inmates in the asylum, distinguishing males and females—their ages—diet—habits—general health—employed or unemployed—and the form of the mental disease.

Other tables show the extent and amount of epidemic illness in September, October, and November—the three months of pestilence. These include cases of diarrhœa and of dysentery, distinguishing the simple cases from those ending in cholera; also cases of cholera preceded by diarrhœa or by dysentery, and those without premonitory symptoms. The following particulars of each form of disease are recorded:—Number of cases—recoveries—deaths—average duration—sex—and whether occupying old building or new.

Of 620 patients, 331, or more than one-half, suffered from disorder of the bowels of one kind or other. In the course of three months there were 200 cases of diarrhœa, 27 of dysentery, and 132 of cholera. Diarrhœa prevailed most among the women, cholera among the men, and dysentery in equal proportion in both sexes.

Of the cholera patients, about one-fifth recovered and four-fifths died. Compared with that exhibited in ordinary returns of cholera, this mortality is high. But the mortality must be compared, not with that occurring in the population at large, but with that in pauper lunatic asylums, where the physical condition of the inmates and their ages are more unfavourable than in the general population.

The ages and terms of residence, and the employment of those sick, are next exhibited. Then follows an elaborate diurnal register, containing a daily record of the numbers attacked and the numbers ill during the three months. These tables show for every day the numbers ill of each sex and the form of disease—the diet of each—a daily meteorological register—the state of the barometer and thermometer, wet and dry bulb—the amount of rain—and direction of the wind.

The relative prevalence of disease in different wards, and the influence which habits, diet, and previous state of health had on the liability to attack, and the power of resisting it, are fully shown. A good meat diet, previous good health, and cleanly habits, are shown (as might have been expected) to have exercised a favourable influence.

Origin of the Pestilence.—The next section is devoted to the discussion of this question, and it is one of the best in the book. Prisons and lunatic asylums afford peculiar facilities for the discovery of the origin of epidemic diseases which find their way into them. The inmates are isolated, and the extent of their exposure known in a manner seldom to be met with elsewhere. We therefore turned, with considerable expectations, to the perusal of this section, and we have not been disappointed.

Dr. Wright believes that the cholera was introduced into the asylum by infection; and, further, that the disease was similarly introduced into the workhouse, from which he believes it to have been conveyed to the asylum. He does not appear to have come to this conclusion under the influence of any preconceived opinion. He has simply yielded to the evidence of the facts which his inquiries have elicited. He is not inclined to deny that cholera is not always (nay, possibly not in general) communicated by infection.

Dr. Wright believes the disease to have been imported from the Gomersal workhouse. The following are the most important particulars relating to the appearance of the disease in both institutions.

Gomersal is situated eight or nine miles from Leeds where cholera was prevailing fatally in August. In the week ending Sept. 1st, four cases of diarrhœa occurred in the Gomersal workhouse in old persons. Bowel complaints were general at the same time in the neighbourhood, but there was no cholera. Sept. 6th, a destitute Irishwoman was travelling with her four children from Leeds to Huddersfield. All five were receive into the *hospital* of the workhouse, (a building detached from the *house*.) The woman died of cholera seven hours after her admission.

During the week ending Sept. 15th, five more of the women had diarrhœa. On the 15th, one (Crawshaw) in *the house* had cholera, and died next day. Next morning another (Brierley) was taken ill with cholera in *the house*, was removed to the hospital, and died Sept. 16th. Another patient, Elizabeth Fenton, commonly slept in a remote part of the same large room with Brierley, but for two or three nights preceding the 15th, in consequence of an epileptic and maniacal paroxysm, she had been in a chair, in a ward upon the floor below. On the morning of Sept. 16th, Fenton took a dose of salts, which operated as usual. She slept that night in her usual dormitory, which had been previously quitted by Brierley for the hospital. On the 17th, Fenton was moved to the asylum at Wakefield, where she was admitted at 3 p.m. At 9 p.m. she was reported ill of diarrhœa. She became rapidly worse, and, although she ulti-

mately recovered, she had a protracted illness, which was considered to be cholera. In consequence of cholera being reported to exist at Gomersal, Fenton, on admission at Wakefield, was kept in bed, isolated from the other patients, the door of her room locked, and no one allowed to enter but the medical officer, the nurse, and one assistant to clean the floor. The *second* case of cholera in the asylum occurred five days later (on the 22nd Sept.) in the person of Mary Morley. She was sleeping on the opposite side of the same *gallery* in which Fenton was placed. In the morning of Sept. 23rd Morley was moved at 10 a.m. into a side room, and again at 2 p.m. to the hospital, where she died on the 24th. The *third* patient, Sarah Atkinson, was attacked ten days later. She was sleeping in the side room which Morley had occupied during the four hours preceding her removal to the hospital, but which had been thoroughly white-washed and purified with chloride of lime. Atkinson died within twenty-four hours. The fourth patient, Mary Marr, slept in a room opposite to that of Atkinson, and died quickly on Oct. 7th. The fifth patient died, with equal rapidity, two days later, and was an inmate of the large room (containing eight beds) in which the second patient, Morley, was sleeping when attacked. These cases all occurred in Ward 3, one of the best wards in the new building. On Oct. 9th, all the patients were moved out, the rooms cleaned, the bedding of those who had died stoved, and for eight days the disease disappeared.

The fifth case occurred in a man, in the *old building*, "who could have had no direct communication with the inmates of No. 3, new building, and was far removed from that locality." He was attacked Oct. 15th, "and almost simultaneously, a woman in No. 1 of the new building, a ward two stories below (then unoccupied) No. 3. Next day another female was seized with cholera in No. 1; one in No. 12, a distant part of the old building; and three or four cases occurred, at the same time, in different wards of the men's part of the institution. The breath of the pestilence had spread itself over both buildings, and each day added fearfully to the number of its victims and the intensity of its virulence." (P. 3.)

The first impression made upon the minds of most persons, by a consideration of these facts, will probably be, that the cholera was introduced into both institutions by infection; and this impression is not improbably the true one. Nevertheless, we think it ought not to be received without reserve, nor as the only opinion possible. Dr. Wright has very fairly stated some opposing considerations.

Before the cholera appeared, bowel-complaints had begun to be more prevalent, and this prevalence was probably due to epidemic influence. If cholera had then broken out without any conceivable communication with an infected place or person, its appearance would have excited no surprise,—it would only have been a repetition of what has occurred in hundreds of other places. No personal contact between the first sufferers can be traced in either institution. The circumstances were favourable to as great a degree of isolation as can almost ever occur, and the extent of intercommunication would be pretty accurately known. If the disease were introduced and propagated by infection, this fact would imply a much greater facility of transmission than is generally supposed, even by contagionists, to appertain to cholera, or than is easily reconcileable with the facts observed respecting the large proportion of persons who are exposed, and yet escape. The further progress of the disease—especially its appearance among the men in the old building on Oct. 15th—is unfavourable to the supposition that it was conveyed by infection.

SECTION II.—WHAT IS INFECTION?

In this section, the question is mooted, whether cholera and the diarrhœa, which is epidemic at the same time, be different stages of one complaint. A strong argument in favour of an affirmative answer is drawn from the distribution of the two forms of disease in the asylum. The period of incubation is likewise noticed, and (if the disease were communicated) appears to have been from five to ten days.

In Section 12, Dr. Wright mentions some facts which merit attention, as tending to show that the progress of the pestilence was suspended for a time by removing the patients, changing their clothes, and fumigating the rooms abandoned.

The causes of the decline of the disease, the symptoms, pathology, and treatment are next treated of in separate sections. Our space will not permit us to follow the author further. Everywhere he gives proof of his industry and intelligence.

We agree with Dr. Wright, that collapse may occur independently of the draining away of the more fluid parts of the blood by diarrhœa. In considering the pathology of the disease we are not, with Dr. Wright, "driven to the hypothesis which ascribes its seat to the ganglionic system of nerves." We are more drawn to the humoral hypothesis, which finds less favour with him.

In conclusion we are favoured with some sensible "lessons to be remembered" in the event of a similar outbreak of the disease in future. For these we must refer to the work itself.

The length to which our notice has extended is the best proof of our high opinion of this book. We cordially recommend it to the study of all persons interested in the subjects of which it treats. We accept it with further pleasure, as one of the indications that the necessity of conducting such inquiries *statistically* is becoming more generally felt. The time and labour which an inquiry like the one before us costs, can only be appreciated by those who have attempted similar things. That Dr. Wright has been able and willing so to devote this time and labour among the interruptions and fatigues incident to a country physician's life, does him the highest credit. We hope the present is an earnest of future inquiries to be conducted by the author in the important institution to which he is attached.

Happiness in its Relations to Work and Knowledge. An Introductory Lecture delivered before the Members of the Chichester Literary Society and Mechanics' Institute, October 25th, 1850, and published at their request. By John Forbes, M.D., F.R.S., Physician to the Household. Pp. 75.

We congratulate the members of the Chichester Institution at having prevailed on Dr. Forbes to publish this introductory lecture; they have thereby multiplied ten thousandfold the pleasure and instruction which would otherwise have been confined within the narrow limits of the Chichester audience. The subject treated of is one of the most momentous that can claim the attention of moralists or of physicians; and it is treated by Dr. Forbes with all that acumen, philosophy, and good sense which distinguish his writings.

It is particularly interesting to find that the views regarding the best means by which the bodily powers and the mental faculties may be best cultivated and most efficiently exercised, so that health of the body and happiness of the mind may be present in their highest degrees, so early impressed themselves on the author's mind that he made them the subject of his inaugural dissertation on his entrance into the Profession of which he is so great an ornament. These youthful opinions have been confirmed by time, and are reproduced in a more complete and perfect form. We trust this lecture will obtain the circulation among all classes of the community to which it is so justly entitled.

Du Mode d'Action des Eaux Minerales de Vichy, &c.
On the Action and Efficacy of the Vichy Waters in Chronic Affections of the Abdomen, Calculous Disorders, Gout, &c. By Charles Petit, Resident Inspector. 1850.

The mineral springs of Vichy are celebrated throughout Europe for their efficacy in cases of gout, gravel, and rheumatism. M. Petit has been for many years the Government inspector, and his numerous works prove that the great opportunities enjoyed by him have not been thrown away. The Vichy waters are essentially alkaline, containing more than five scruples of bicarbonate of soda to each pound of water. The composition of the water, therefore, naturally leads to an explanation of its action; it is, moreover, absorbed with surprising rapidity. The use of a single bath, even without internal administration of the waters, generally suffices to render the urine alkaline. The perspiration likewise soon becomes alkaline; and the other secretions are after some time rendered more fluid, losing their plasticity. From these simple facts we can readily deduce, with M. Petit, the manner in which the Vichy waters act for the cure of various affections depending on or connected with an excess of acidity in the fluids. The waters also contain iodine, bromine, and other salts in small proportion, and these prin-

ciples manifestly aid the action of the alkali; because bicarbonate of soda administered alone, in the proportion necessary to form Vichy water, is far from possessing the same efficacy as the mineral spring.

The power of Vichy water to dissolve certain forms of calculi has long been known. M. Petit shows that it enjoys the valuable property, also, of dissolving the mucus which binds together the lithic particles of calculi in an early stage.

As to the effects of the spring on gout, M. Petit is not quite so clear or positive. All that we can say at present, perhaps, is, that gouty affections are benefited, not radically cured, by a careful use of these precious waters.

Das Kramphafte Asthma der Erwachsenen. Von Dr. J. Bergson.

The Spasmodic Asthma of Adults. A Prize Essay. By Dr. J. Bergson, Nordhausen. 1850. 8vo. Pp. 140.

The object of the author of this essay is to prove that the spasmodic asthma of adults is a malady not dependent on other affections, as many modern writers believe, and who have confounded continued dyspnœa with periodic asthma, but is essentially an original nervous ailment. To establish this view, the author has drawn a parallel on the one hand between the *neuroses* and asthma, and on the other has entered fully into the etiological, prognostic, and therapeutic relations. He then discusses the points connected with pathological anatomy, referring especially to the microscopic structure of the organs of respiration, to the muscular structure of the most delicate ramifications of the air-tubes and pulmonary vesicles, to the physiological experiments touching the contractility of these muscular fibres, and to the motor influence of the vagus nerve. Asthma he regards as a spasm merely in the muscular apparatus of the lungs.

He controverts, at considerable length, the idea of asthma being of a paralytic nature, and shows that the symptoms of the so-called "paralytic asthma" point rather to a spasmodic than a paralytic condition.

In the concluding section of the work, the author furnishes the differential diagnosis between asthma and the following affections; chronic pituitous catarrh of the lungs, dry catarrh, œdema of the glottis, and chronic contraction of the larynx and the trachea.

The essay, as a whole, may be reckoned a type of German industry.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

TREATMENT OF STRABISMUS.

Everything in this world has its rise and fall—operations like the rest. There was a time when no unfortunate with a squint could walk the streets of London without being seized on by some juvenile Dieffenbach, and cut incontinently, whether he wished it or not. Awful eyes, indeed, did they turn out; but the mania soon subsided, and now we hear nothing of it. Dieffenbach, however, had proposed another treatment for strabismus,—or rather for certain forms of that disease,—which is little known, and seldom practised. In some cases of strabismus the deformity arises from paralysis of the ocular muscles, often of those supplied by the third pair of nerves. Here Dieffenbach was accustomed to employ cauterization of the conjunctiva over the trajet of the affected muscle. M. Deval has recently repeated the operation with the best effects. In one case the eye was turned strongly outwards. It was impossible to ascertain the cause of the deformity, which had appeared suddenly; but slight paralysis of the eyelid of the superior rectus muscle and feebleness of vision rendered it probable that loss of power was the main one. Other means having failed, M. Deval passed a nitrate of silver pencil over two points of the conjunctiva covering the internal rectus muscle. This produced an evident improvement, and after the fifth application the patient was completely cured. In applying the caustic care must be taken not to pass much beyond the limits of the muscle, and to prevent the melted nitrate from being carried by the secretions over the globe of the eye.

MATICO.

The Marquis of Santa-Cruz has sent a small specimen of this substance from Bolivia to the Academy of Medicine, with a high eulogium of its styptic properties. MM. Merat and Velpeau, however, were unable to make sufficient experiments from the smallness of the quantity furnished to them, and the Academy have sent to Bolivia for a further supply. Could they not obtain it nearer home from Dr. Jeffries, of Liverpool?

TREATMENT OF RHEUMATISM.

The Academy of Medicine has been engaged for several days in a discussion of the best means of treating acute articular rheumatism; but all the talent, experience, and learning displayed, have little other effect than to show how "doctors can differ" when the cure of disease becomes the question of debate. Yet, how can men agree on the treatment of a malady when they differ essentially in their opinions concerning its nature? Many members of the Academy, Bouillaud, Piorry, and others, see nothing in acute articular rheumatism save inflammation of the joint. M. Grisolle regards rheumatism as a general disease, and denies that inflammation has anything to say to it. Lastly, the majority of the Academy seem to consider the complaint as a special one, with which inflammation of the joints or other parts may be connected in a secondary, but not essential manner. With such diversity of views, it is not astonishing that various plans of treatment should, in turn, be extolled or rejected. M. Bouillaud still sticks to his formula of bleeding, "*coup sur coup*;" but the Academy evinced an evident disinclination to accept his statistics, while it was shown that it was impossible, from M. Bouillaud's published cases, to determine the exact duration of the treatment. M. Piorry affirms, that it is reduced to less than four days by repeated bleedings; and, moreover, informs us, that the celebrated formula of "bleeding *coup sur coup*," was a larceny committed on him, the aforesaid Professor Piorry. M. Martin Solon insists on ths superiority of nitre over all other remedies for the cure of articular rheumatism, and thinks that it is the one most appropriate to the nature of the disease. The sulphate of quinine, say others, is the only remedy on which dependence can be placed. Finally, according to M. Dechilly, whose memoir gave rise to the five days' discussion now alluded to, articular rheumatism is a local malady, and best treated by a succession of blisters over the affected joint. None of the various speakers alluded to the tendency of many cases of rheumatism, thus apparently cured, to pass into a chronic stage; nor to the efficacy of the vapour and water treatments, which have assuredly, even in the hands of comparatively ignorant persons, been attended with surprising success, after what is called regular medicine had been tried for years and failed.

IRELAND.

SURGICAL SOCIETY.

The second meeting of this interesting Society was held on Saturday, the 7th inst., with an excellent muster of members. Dr. Barrow brought under review the subject of polypus-uteri, and detailed a case of this disease in an old lady of 74, in which he had recourse to the ligature with the most marked benefit. The mode of operating recommended by the Society was, transfixing the pedicle of the tumour by a needle doubly armed, and tying on each side. Although hæmorrhage and all the other symptoms were very troublesome before the operation, since then the old lady feels comfortably renewed in health. The much vexed question of

SCIRRHUS OF THE EYE-BALL

was next brought under the notice of the Society by Dr. Jacob. There are few questions perhaps of greater interest, than the diagnosis of malignant and non-malignant tumours of the eye, as mentioned in the lectures of Mr. Haynes Walton, in your pages. We took opportunity before of alluding to a form of non-malignant tumour mentioned by Dr. Jacob, not unlike a wart, and previously considered malignant. The microscope, in the hands of Dr. Carte and some others of the Dublin school, has revealed all the distinctions spoken of by authors, and promises to be very valuable in practice. The case, however, brought under the notice of the Society on Saturday was distinctly malignant; the circumstances and history of the patient Dr. Jacob thought such as fully to warrant the operation. On examination, parts only of the eye-ball were found truly scirrhous; other parts, soft cancer. Much bleeding followed the operation. Dr. Jacob seemed to say, however, that nothing was lost, but perhaps much gained, as to the chances of the ultimate recovery by the operation.

PUERPERAL FEVER.

Some views lately put forward by Simpson as to the analogy or

identity of puerperal fever, with the fever after gun-shot wounds or amputations, has created some sensation among obstetric practitioners. The idea has been long held in Dublin, and is by no means new. Since the first naming of this formidable disease by Strother, we need scarcely remark, all possible opinions have been entertained of its nature. At successive periods it has been looked on as phlebitis, as peritoneal fever, contagious child-bed fever, putrid, malignant, and bilious fever, and by Dr. Lightfoot, in the *Medical Times*, as hysteritis; by the Italian school, with Gamberini, as a change in the fluids; by the Hunters traced, with their usual practical ability, to the particular state of the uterus after delivery, together with an epidemic influence, Gooch calling it peritoneal fever from Hunter's writings, the disease perhaps beginning in the uterus, but ending in the peritoneum, as *post-mortem* revelations always show the lining membrane of the abdomen full of pus. Simpson's opinion is, that puerperal fever is the same as traumatic fever after wounds—a view of the disease well put forward also by Dr. Henry Kennedy, not long since, at the Dublin Obstetrical Society. The uterus Kennedy looked on, after delivery, as similar to a large open wound; amputation, so to speak, of the mass of the placenta having taken place. At particular seasons puerperal fever is more fatal. In 1843, he saw numbers of cases. There is a large group of diseases, he thinks, to which it belongs—typhus, the exanthemata, diffuse phlegmon, erysipelas, dissecting wounds, &c. Kennedy, with Fergusson, is of opinion that the disease is rendered fatal by the formation of a poison in the system of the patient herself. He thinks the disease *then* becomes contagious, like typhus, and may be carried by a third party, as a student or midwife. Nay, he cited an instance in his own practice. A woman in perfect health was confined in a room adjoining one where there was a bad case of typhus. She suddenly got puerperal fever, and died. Kennedy has seen also the dark mulberry vibices or blotches of typhus in puerperal fever. The fever is the chief thing to contend against in the treatment, he says, not the peritonitis, which is only secondary; he is, accordingly, against the practice of bleeding; and mercury, where the system is deeply poisoned, he thinks quite as inadmissible.

LIVERPOOL.

NEW COUNTY LUNATIC ASYLUM.

I have this week to report the completion of this institution at Rainhill. It was commenced two years ago for the purpose of providing for the reception of lunatic paupers sent from various unions in this (the southern) division of the county. Formerly it appears that an enormous expense was incurred in the maintenance of these unfortunate people, while the institutions to which they were sent did not afford facilities for their recovery. The building is contiguous to the railway, and central as regards many of the principal unions, from which the majority of the paupers are received.

The asylum is one of the largest in the kingdom, and was designed by the late Mr. H. L. Elmes. The front elevation, viewed from a distance, is somewhat striking, and a uniformity and harmony pervade the whole, which produce an agreeable effect. The building is of freestone obtained from a quarry on the estate.

The establishment will accommodate 400 patients, and it is said that already that number are waiting to be admitted.

The probability of an enlargement has, however, been anticipated, and the building may at any time be extended without interfering with the original design. The asylum and grounds attached comprise an area of 84 acres, 2 roods, and 34 perches.

The asylum will be opened on the 1st of next January, when a number of patients will be transferred from Haydock-lodge.

The governor or medical superintendent is Mr. Thomas Eccleston, who is said to have had considerable experience in the treatment of lunatics, and the system of management adopted at various institutions. The matron is Miss Stephenson.

GENERAL CORRESPONDENCE.

ADVICE TO STUDENTS.

[To the Editor of the Medical Times.]

SIR,—In a late number of your journal "Vigilantius" anticipated me in his well-merited tribute to your excellent address to the medical students of the present session.

I hope I shall not incur the charge of egotism or self-commendation in giving something of my own experience when a pupil, confirmatory of the practical value of his most excellent "hints;" for whatever type a student's pursuits may impart to his future career, or whatever promise the character of the pupil may afford of his ultimate success, a man is not judged by what he was fifteen years ago.

For the "double purpose of keeping up the knowledge, previously acquired at school, of the Greek and Latin languages," "Vigilantius" strongly recommends to students the practice of reading every morning, before commencing the studies of the day, a chapter in the Greek or Latin Testament.

This practice I regularly adopted during the term of my medical studies in London in 1832, '33, and '34, and I can confidently add my testimony to the pleasure and advantage of such a daily habit. I found the half hour or hour thus devoted every day sufficient to keep up a fair acquaintance with these languages, so that previous to my examination I had no need to submit to the inopportune drudgery of re-acquiring them, which I know was the case with several of my fellow-students who left school better classics than I was. Moreover, I am convinced that no young man who has been brought up in religious principles, and who acknowledges the Divine authenticity of the Holy Scriptures, can read the Testament, in the original Greek especially, though by a slow process of translation, without being impressed with the deep meaning of every passage, and with the expressive language of the text, nor fail to be strengthened against the numerous temptations which surround him by the holy precepts which it contains.

With regard to the "second hint" of "Vigilantius," as to the observance of the Sabbath—to the fact, that "a greater amount of sustained exertion can be endured, if there be a regular pause or suspension at stated intervals of time, I can give a student's experience.

Three fellow-apprentices, nearly of the same age, and equally ambitious, entered to the medical department of King's College, London, in 1832. They lodged together, and commenced their studies with a firm determination to devote all their time and attention to their professional duties. Early and late, whether by the pale morning light or by the "midnight oil," they patiently and perseveringly pursued their object. Two of them, grudging even the interruption of the Sabbath, continued to urge on their studies even through the day of rest, and this appropriation of the Sunday they deemed the more necessary, to make up for one evening in the week, at least, spent at the theatre; "for such long-continued mental exertion required it to relieve the over-strained brain, and relax the mind." But even this exciting interval from labour did not answer the purpose, for the mind never was sufficiently refreshed; *ennui* and mental fatigue were the necessary consequences of such almost unbroken and monotonous application. The other student had been taught at least to consider the Sabbath as a day of rest, and, therefore, religiously laid aside all his "professional and technical studies" on that day; and if his observance of the "special duties" of the day, and his "pursuit and meditation" on works wholly different from the every-day routine of study did not "elevate and spiritualize his thoughts and feelings," they at least had the effect of refreshing and strengthening them, and of enabling him to recommence the week with renewed energy and hope, without the necessity and expense of a night's entertainment at the theatre.

The two former, who are now highly respectable and successful practitioners, left London at the end of their term of study, with their diplomas; the latter also brought away with him the first gold medal for general medical proficiency, and prizes in five different departments of medical study.

"There is that scattereth and yet increaseth, and there is that withholdeth more than is meet, but it tendeth to poverty."

Liverpool. M.D.

THE CHOLERA AT PLYMOUTH.

[To the Editor of the Medical Times]

SIR,—The delay that has occurred in my replying to Mr. M'Laren's letter, has arisen from a desire on my part to ascertain the exact date of his arrival at Noss, as I had a strong impression that he was not there until the latter end of July, when the cholera had left the place, and such I find to be the case, notwithstanding a foot-note to his paper published in the *Statistical Journal*, where he states that "the opportunity to observe the progress of cholera in the district was afforded me by the kindness of my friend Mr. Bowie, Government Inspector of Cholera, who invited me to accept the appointment, as an opportunity presenting a most exquisite instance of epidemic severity." If this means anything, it is to convey the impression that Mr. M'Laren was at Noss, hard at work when the cholera was there in its most exquisite severity. He says his "visit there was for the purpose of inquiry and study;"

and he keeps up the illusion of his being an eye-witness of those fearful scenes throughout both his paper and letter, while the fact is, that he was not there until July, and really saw nothing of the disease in its intensity. He has worked up with amusing ingenuity some tables, telling us how many of each age were attacked, and how many recovered, &c. &c. Why, Sir, I have at this time before me four tables, obtained from the most trustworthy sources, of the deaths alone; and all differ materially from each other as to the ages of the persons named in them. And again, during a laborious investigation on the spot of the various statements as to the spread of the disease, I found the utmost difficulty in obtaining accurate data even for the most important occurrence. Nor is this surprising. The minds of these poor fishermen are not schooled to method, and harvest-time or pilchard season, Michaelmas or Ladyday, sunrise and sundow, or gun-fire, are almost their only temporal calculations. Upon the faith of such evidence as these poor unlettered people can furnish, table after table is built up, which have absolutely no more substantial foundation to rest on than the baseless fabric of a dream. But Mr. M'Laren, disporting in the luxuriance of his imagination, revels on, at one time abusing the schoolmaster, then trying to prove that influenza is cholera in embryo, and anon tells us, with the glee of a Cockney school-boy let out for a half-holiday, that, when "released from the arid heat of the London summer," he "found the smell of the ocean's freshness" in the veriest puddle that ever goose quacked in. But enough of this. The facts are briefly, that in the second week in June, when the cholera had only been about seven or eight days at Noss, a census of the population was taken, and it was found to be either 352 or 353. Mr. M'Laren was not there until long after, when the disease had ceased, and he made out, by some system of multiplication best known to himself, a population of 400 souls. Even supposing that Mr. M'Laren had been at Noss when the cholera was there, I do not see that it necessarily follows that he is infallible, or that we should accept his statement in preference to that from others, who, having had superior opportunity of obtaining information, could use that information with ability equal to his own. That he is not infallible I have already shown, (a) by the errors he has committed, as regards both the number of deaths and the outbreak at Bridge-end.

In conclusion, permit me to observe, that nothing in this letter is meant offensively nor uncourteously; and I hope my remarks will be received in the spirit they are dictated in—good-will to all men.—I am, Sir, &c., EDWARD T. ROE, M.D.

Princess-square, Plymouth.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

Si proprium est quod quis libra mercatur et ære.
Qui te pascit ager tuus est.

SIR,—The last allegation I proposed to consider was that which related to the influence said to be exerted in the affairs of the Royal Medical and Chirurgical Society by the Royal College of Surgeons. Certain it is, that few corporate bodies have afforded more just grounds of complaint than have been, at various times, evinced by the College of Surgeons; and, although those elements are now in slow operation which will ultimately place the College under better control, they have arisen out of alterations in which the College has had little share beyond the equivocal merit of a reluctant concession to a pressing, if not overwhelming necessity. The abuse of power which has been so often practised by the College commences in the endeavour made by the surgeons of the London hospitals, that their colleagues and successors should be chosen from amongst their own apprentices, and in which they have so generally succeeded, that the very few exceptions only serve, when explained, to prove the rule. By this plan they derive large sums in securing a succession of apprentice-fees, besides the sums being repectively larger, in consequence of the prospective chance of a position which is thus indirectly made a matter of sale.

It is impossible to imagine a plan in which the interests of the public or of science are left more completely to chance than the one in question. It obviously makes the tenure of a most important post in no way *necessarily* dependent on the absolute fitness of the individual, whilst it renders it altogether *independent* of his *comparative* eligibility, in so restricting the field of choice as well nigh to annihilate competition. Accordingly, we find persons of all degrees of eligibility, (if we may still retain the word,) amongst those who have been surgeons of London hospitals, and certainly not a few who would have stood no chance of obtaining the position under an open system. The result has been neither more nor less than this—that, of all persons in Europe or America, few men have contributed so little in aid of anything like a real science, in *proportion to their opportunities*, as the surgeons of London hospitals; whilst, on the other hand, few have disseminated more serious errors. Mr. Hunter and Mr. Abernethy will occur at once as illustrious exceptions; but let us see how far they throw any credit on the hospital system. Mr. Hunter never was an apprentice at all; and St. Bartholomew's, in all probability lost the honour of having him as a surgeon from the apprentice restriction, which sent him to St. George's, where the condition was less enforced. Mr. Abernethy, who made the school of St. Bartholomew's, and whose class must have put thousands into the pockets of the surgeons, was allowed to linger in the subordinate capacity of assistant-surgeon for twenty-eight years!!(a) So much for the system, and especially for the merciless way in which it has been administered at St. Bartholomew's. Returning to the apprentice fee, nothing can be more absurd than, under such a system, hospital surgeons claiming position at the Royal Medical and Chirurgical Society or anywhere else *as such*. I would not, for one moment, presume to scan their merits as gentlemen, or even as professional brethren. Nobody with more pleasure would admit, or bear more ready testimony to the private worth of many; but, as *hospital* surgeons, I aver, that neither in reason nor justice can they claim anything but a perceptivity of the principles of trade, and an application of them to obtain positions which should be alone accorded to scientific distinction—a system upheld by the College of Surgeons, *a fruitful source of mischief to the Royal Medical and Chirurgical Society;* a trade scheme which has often conferred protection on indolence and incapacity, robbing merit of its due reward, and depriving the public of the benefit of just that kind of competition which is the surest source of excellence. A glance at the officers of the College and those of the Royal Medical and Chirurgical Society will at once show the working of the system; the secretaryship, which it is important should be held by persons best fitted for the office, having, as regards the surgical secretary, been held exclusively by hospital surgeons or their apprentices since 1812 inclusive, with one single exception. I do not know the position in this respect of the Secretary the few years antecedent to this period (Mr. Aitken). If we look to the surgical presidents we find that here too there has been the same evidence of job, *every surgical president having, with two exceptions*, been a surgeon to a London hospital. Whatever the claims of others may have been, they appear to have been passed over, and, as we might expect, *in both places*. Mr. Copland, for example, was never elected a president of the Society; we accordingly find him passed over in the Court of Examiners of the College, so that he has been equally passed as *president* of the College, than which, if his position did not place him above it, it is difficult to conceive anything more unjust or insulting. Similar relations may be seen in the Councils of the two Societies, and those who imagine that this does not affect the *medical* appointments also, have only to extend the investigation to which these facts point. In Bartholomew's, Mr. Lloyd and Mr. Paget are exceptions; but which prove the rule? Mr. Lloyd got the position by a concurrence of numerous circumstances which enabled him successfully to oppose the influence of the surgeons of the hospital; a success which they seem to have resented in passing him over in the Council of the College, and by, as it is said, an unmitigated regret, but imperfectly concealed. Mr. Paget's is a different case, and illustrates, I hope, the existence of a wedge which will help, in due time, to rend in twain the abominable system. When the College were obliged to allow the teaching to be more open, competition led to the adoption of prizes in the schools, and this enabled Bartholomew men, for the first time, to chronicle their industry in something more tangible than the *memory of their teachers*. Mr. Paget availed himself of this in no measured degree, by gaining a great many prizes, and this, naturally enough, led the teachers to employ him in the school. So far so good. But the interest of the Bartholomew school next rendered it very convenient to appoint Mr. Paget Professor to the College of Surgeons, to the exclusion of claims which could not be compromised without the greatest injustice. Still it suited the interests of that school; and the absence of the experience usually connected with the Professorship of Surgery to the College was easily met by altering the phase of the lectures, for a time, from a mere surgical to a more physiological character; and then the "job" had the sup-

(a) Vide *Medical Times*, No. 569, p. 197.

(a) It is a very impressive circumstance, that it was an injustice of a very analogous description, which, by its indirect operation, was the cause of the death of Hunter.—See Palmer's Life of John Hunter.

porting coincidence of the appointment of a man whose general merits nobody for a moment questions, whatever doubts some may have entertained of his special fitness for teaching experienced surgeons. The relations of Mr. Lawrence and his friend Mr. Stanley to these and other proceedings, and those which they bear to the memory of Abernethy, and the interests of Messrs. Lloyd, Macilwain, and others, are chronicled; but they are beside our present question, which is not the development of private wrong, but to direct attention to certain influences exerted by the College on the Medical and Chirurgical Society. Here, then, Sir, I shall close the subject of the allegations which I proposed to consider, and offer a few remarks on the remedies proposed; which, with a brief notice of any correspondent whose remarks may require it, will conclude the present communications, and, if necessary, dispense with the signature, of SPECTATOR.

CASES ILLUSTRATING THE STYPTIC PROPERTIES OF THE OIL OF TURPENTINE.

[To the Editor of the Medical Times.]

SIR,—In your journal for August 17th there appeared a very able paper by Dr. Budd, of Bristol, on the styptic properties of the oil of turpentine. Having since then had frequent opportunities of testing the efficacy of that oil, and finding it to be, as stated by Dr. Budd, a most valuable remedy in restraining hæmorrhage, from whatever cause arising, the report of the following cases may perhaps be not without its use. For brevity's sake I copy the cases *verbatim* as entered in my note-book at the time of treatment. I should state, that to obviate the chance of sickness occurring from the use of the turpentine, I added to each dose three or four drops of tinct. capsici, as recommended by Dr. Copland; and, where this failed to prevent vomiting, I gave it with the addition of a little creosote—half a drop or a drop to a dose.

Emanuel Taylor—Tuberculous Hæmoptysis.—Aug. 22, 9 a.m.—Much worse, and coughing up large quantities of florid blood; had taken his old medicine (acetate of lead and opium) but derived little benefit from it. Ordered him cold drinks, and to try the turpentine thirty drops quatuor die in milk. 23rd.—Better; sputa streaked, but no blood spat up since 8 last night. Commenced drops at 10 a.m. 24th.—Better; sputa not streaked. 25th.—Hæmoptysis returned slightly last night, through talking too long to some friends. To be kept quite quiet and increase the dose to forty drops 4tis qua. horâ., to be taken in mucilage, the cough being rather irritable. 26th.—Better; no blood. 28th.—Better. To take the drops bis die. Sept. 6.—Cough as usual, but no blood spat up since last report. 27th.—Still same; cough, but no hæmoptysis.

Mrs. Davis—Hæmatemesis.—August 27, 8½ p.m.—Had been beaten and kicked about the abdomen, and flung against the edge of a bed by her husband. Found her vomiting a quantity of dark-coloured blood, and complaining greatly of pain over the stomach. Ordered hyd. chloridi, gr. v. statim s. and ol. terebinth. and ol. ricini a. ʒiij. Great retching, but the dose remained. Up to this time had vomited fully a pint and a half of blood. 11 p.m.—Vomiting of blood ceased; bowels opened twice; stools sooty and fetid; urine high coloured. Ol. terebinth. ʒss. sec. qua. horâ in milk. 28th.—Comfortable night; no more blood vomited; stools much lighter and less fetid; urine paler. Thirty drops ter die. 29th.—Better; no return of the vomiting. 30th.—Better; stools natural; and the pain nearly gone. To take thirty drops bis die. Sept. 1.—Convalescent; has not vomited any blood since first taking the drops. 30th.—Has continued well.

Samuel Heyward—Hæmorrhage from the Bowels (Entirrhœa).—Sept. 13.—Had lost four times that day a large quantity of blood from the bowels, and was now weak and pallid in consequence; had over-exerted himself the day before; and that morning, his bowels being confined, had strained greatly at stool. Examined as to hæmorrhoids, but none existed; hæmorrhage evidently coming from ruptured vessels on mucous surface of the bowels. To lie very still, have enema of cold water, and take of turpentine forty drops in milk every hour for three doses; then, if better, thirty drops every three or four hours. Castor-oil primo mane if bowels not acted on. 14th.—Bowels relieved since last night; blood in first evacuation, but scarcely any in the second. 15th.—Bowels opened a third time at 3 p.m. yesterday, no blood whatever visible; again this morning, and no blood. To reduce the drops to twenty ter die. 16th.—Better. 19th.—Better. 26th.—No return of the hæmorrhage; convalescent. Oct. 16.—Continued well since last report.

Thomas Cope—Tuberculous Hæmoptysis.—As this case was similar to Taylor's, I omit details; suffice it to say, that from the taking of the turpentine not even the sputa were streaked with blood, though large quantities of it had been spat up previously.

Mrs. Curtis—Menorrhagia.—Nov. 3, 1½ p.m.—Worst case of flooding I ever witnessed; bed and bedding completely saturated, and a perfect pool underneath, the discharge still pouring from her in constant gushes. Took away pillows, had hips raised, room cooled, and bedclothes removed. Gave turpentine ʒss., tinct. opii, ʒj., in cold brandy and water. Ordered cold cloths sprinkled with turpentine to be applied plugwise to the vagina, and patient to drink freely of cold water, or a little brandy and water if very faint. Head to be kept very low, as she complains of her sight being "so dim," the consequence of her loss. Left turpentine ʒij. to be given in an hour if the flooding did not abate. 3½.—Flooding quite ceased. "That draught, Sir, stopped it directly;" "had all ceased in a little more than ten minutes after you left." ʒij. dose not taken, as patient was so comfortable. Ordered them to give her thirty drops in milk every two hours. 6½.—Better; pulse risen and no flooding. 11.—Very comfortable, and inclined to sleep; no strangury or vomiting, flooding not returned. To take twenty drops every four hours. 4th.—8½ a.m.—Patient going on well; had slept most of the night, so had taken the drops but once; no return of the flooding. 7 p.m.—Still better. 5th.—Better, 6th.—Better; to take twenty drops bis die. 8th.—Down stairs on sofa, and had no return of flooding since the 3rd. To cease drops and take infus. rosæ with tinct. cinchonæ comp. ter die. 16th.—Called at surgery and "feels pretty well, but weak." 23rd.—Quite well; flooding never returned; has regained her colour, and seems strong again.

Mrs. Taylor—Uterine Hæmorrhage after Parturition.—Nov 6, 10 a.m.—Child born when I got there; left her comfortable and came home. 12½ a.m.—Fetched in a hurry; violently flooding; patient seemed sinking; had been flooding for two hours without any cessation; got some brandy down her, and gave full dose of ergot and opium. Left directions, and sent up ʒvj. of turpentine to take directly in the brandy and water, and turpentine cloths to be applied as a plug to the vagina. 2 p.m.—Brought word flooding had "quite ceased," and patient felt better. To take twenty drops every three hours in a wineglassful of milk. 4.—Found her rallied wonderfully, and flooding entirely abated. 10.—Had vomited last dose, so added to the remaining six doses four drops of creosote; to take one dose every six hours, unless flooding returns. Nov. 7.—Has had a good night and is considerably better; no return of flooding. 20.—Recovered; no hæmorrhage since the 6th.

In addition to the above six cases, I have still under hand seven others, and out of the thirteen so treated only one case has been unsatisfactory. It is that of Anne Lesson, an Infirmary patient, (still under treatment,) but even in this case (hæmoptysis) the turpentine had a decided effect; as, although she had coughed up blood daily previous to applying at the Infirmary, after the exhibition of the turpentine she had no return of the hæmoptysis for five days, when her husband coming home and beating her, it returned as bad as ever. Still it is evident, were he (the exciting cause) removed, that the woman would go on well, as it is only when he ill uses her or frightens her by his threats, that the hæmorrhage returns. The remaining cases are progressing most satisfactorily; a decrease in, if not a cessation of the hæmorrhage taking place in each case after the administration of the turpentine. These six cases consist of one violent and continued epistaxis,—ceased after a ʒij. dose, and only has recurred twice since on different days; one hæmaturia,—here severe strangury followed ʒi. dose, but the urine soon cleared after a few thirty-drop doses, and the strangury was relieved by milk and other diluents; two menorrhagia,—in one of these a ʒiij. dose, the turpentine acted like a charm, the flooding ceasing almost instantly, as in the case of Mrs. Curtis; and in the other case, passive menorrhagia, great benefit was derived from smaller doses. The remaining two cases are hæmoptysis and uterine hæmorrhage; the latter case so satisfactory that I shall for the future, to most midwifery cases, take with me not only the ergot and opium, but also a little bottle of the turpentine for emergencies, as I am sure, from what I have witnessed of its effects, that we have in turpentine a most valuable remedy for the violent floodings we every now and then meet with after delivery, and where every moment is of consequence. Surely, if we are satisfied that such a medicine *does* possess the power over others speedily to subdue such hæmorrhage, we should be highly culpable if we endangered a life through a foolish clinging to some favourite remedy. I am quite satisfied with the trial I have given it, and I should be truly glad if this report of cases in which I have tried it should be the means of inducing other practitioners to make trial of it, and thus be able to judge for themselves. As a general rule, I think

milk will be found to be the best vehicle for its administration, as I find strangury very seldom occurs when it is so given. Some patients may perhaps object to this medicine, if they know it is turpentine. Should such scruples exist, a little sp. cinnam. and tinct. lav. comp. will soon set matters right, as few with such addition would recognise in their drops the oil of turpentine.

Apologising for occupying so much of your valuable space,

I am, Sir, &c.,

T. Waldron Bradley.

Kidderminster.

DR. SNOW ON CHLOROFORM.

[To the Editor of the Medical Times.]

Sir,—I shall be obliged if you will allow me space for a few observations in reply to some remarks in the Clinical Lecture of Mr. Bransby Cooper, reported in last week's *Medical Times*, respecting the effects of chloroform on a patient on whom he operated for the removal of a large tumour of the thigh. My object is merely to prevent mistaken impressions which might limit the application of the greatest boon that medical science has conferred on the present generation; and I feel confident that Mr. Cooper himself will be glad that I have given expression to my opinions, though they differ somewhat from his own. The operation in question did not appear to me to be a protracted one, but rather the reverse, considering its magnitude. The quantity of chloroform inhaled was between two and three fluid drachms. I have often been present at more protracted operations, at which a much greater amount of chloroform was consumed. The collapse, as Mr. Cooper terms it, undoubtedly arose from the loss of blood, and had no connexion with the chloroform. On a surgeon who stood near to me remarking on the faintness of the patient, I observed that it would have occurred without the chloroform, to which he fully assented; and I thought that such was the opinion of every one present, but have, it seems, been mistaken. I gave wine to the patient at the conclusion of the operation, certainly with no view of removing the effects of the chloroform, for I believe that these agents have a very similar action.

With respect to the loss of blood being small, if the term be used in comparison with what might be expected in such an operation, I can in some measure agree to it; but I consider that it was large compared with that which usually takes place in operations. Every one who has read the description of the operation will perceive that the hæmorrhage would be likely to be considerable, and, at all events, it was such as to tell very decidedly on the pulse and the colour of the lips. The fact of the hæmorrhage being chiefly venous, would not lessen its after effects, though it might diminish the danger at the moment. The large wound from the operation would also assist in keeping up the collapse; for, although chloroform usually leaves a soothing effect for some little time, the system begins to feel, more or less, the effects of any injury that it may have sustained as soon as the insensibility passes off. As for the reaction, which Mr. Cooper states did not take place in his patient till between ten and eleven at night, it was the reaction from the operation, none taking place from chloroform, as it is not required. I have seen a patient upwards of eighty years of age inhale six fluid drachms of chloroform for neuralgia in the course of the evening, and yet there was neither depression nor reaction from its use, the pulse being scarcely affected by it. The patient merely recovered from his insensibility after each inhalation. The only depression which I have seen produced by it, is that connected with a feeling of sickness which it sometimes occasions. That chloroform, when incautiously given, is capable of causing sudden death, must be freely admitted; but, used with due care, its effects quickly pass off; and under no circumstances is protracted collapse one of those effects. Its action, on the other hand, is rather that of a stimulant; a tincture of chloroform having been in use for many years, under the name of chloric ether, as a diffusible stimulant and antispasmodic.

All those who were in the Profession before the discovery of inhalation for causing insensibility to pain, must remember that syncope was by no means uncommon at operations, whilst now the reverse is the case; and in some hospitals where chloroform is constantly used, brandy, wine, and ammonia have altogether ceased to be kept in the operating theatres. Out of many hundred operations that I have witnessed under the influence of chloroform, I can only remember five in which spirits, wine, or ammonia were given on the operating table, and only two, in addition to Mr. Cooper's case, in which there was severe and protracted collapse. In these two cases the operations were of unusual magnitude. I have, however, heard and read of operations performed years ago in which the patients died on the table, and that, occasionally, when neither the loss of blood nor the injury inflicted seemed adequate to cause such a result; and if, now and then, we still see great collapse following an operation, we ought, rather than blame the chloroform, to consider whether the event might not have been still more disastrous if the patient had had to suffer the pain of the operation."

Mr. Cooper describes the subsequent state of the patient as follows:—

"During the next two days her condition was very precarious. There was a quick, feeble, and at times fluttering pulse, dry and parched tongue, excessive thirst, hot and burning skin, frequent vomiting, and occasional rigors, attended with no salutary action whatever in the wound, which discharged a greenish, exceedingly offensive, watery fluid. A favourable change, however, then took place."

Respecting these symptoms he says:—

"I have some little hesitation in speaking confidently or decidedly as to the true cause of her symptoms since the operation, namely, whether they were simply and purely the effect of loss of blood on an irritable subject, or whether they were the consequences of hæmorrhage modified by the influence of chloroform. I am disposed to incline to the latter however, for she certainly sustained but little loss of blood during the operation, and what she lost was chiefly venous; and, I must say, her condition has appeared to me rather to be produced by the influence of some poison, some irritating or abnormal constituent in the blood, than by the influence of hæmorrhage."

Now, any medicine may be called a poison when spoken of in a disparaging sense. Chloroform is a narcotic of the least irritating kind. In point of strength it is situated between opium and alcohol, but it differs from both of these agents in the short time which it remains in the blood. On the day subsequent to the operation, chloroform could only remain in the blood in almost infinitesimal quantity, whilst the opium, if not the alcohol, she had taken, would probably remain in comparatively much larger quantity. Experience, however, indicates that the symptoms (unless it were the single one of vomiting) could arise from none of these "poisons," and that, if due to a poison at all, they must have been caused by some of the morbid poisons which are apt to infest an hospital—such as that of erysipelas. The vomiting was most likely due either to the same cause as the other symptoms, or to the opium taken on the evening after the operation, but, whatever its cause, it was probably not injurious.—I am, Sir, &c.,

54, Frith-street, Soho. John Snow.

PERICARDITIS.

[To the Editor of the Medical Times.]

Sir,—From the high and scientific character of the *Medical Times*, and the very great interest attaching to the question of the cure of pericarditis at issue between Dr. Davis, of Bath, and me, perhaps you will allow me to say, that I by no means, as expressed in his last letter, consider perfect recovery the "rule;" but in by far the largest and saddest majority of cases the exception, The chief interest, indeed, in the case I published in your pages consisted in its being an exception. I have seen since some half dozen cases in which steady doses of nitrate of potash and carbonate of potash (after the first febrile attack was got under) have acted in the most satisfactory manner in the disintegration and removal of deposits in the pericardium. The five cases adduced by Dr. Davis he will see himself prove nothing. A perfect cure, with a *post-mortem*, looks something very like a Hibernicism. His cases of "pericarditis in perfection," but no friction sound, puzzle me equally; but, as he has shifted the *onus probandi*, I must rest satisfied with even such scant materials for future thought.

The question is one, I need hardly remark, of the very deepest practical value, and lies at the fountain head of all our modern heart diseases. Rheumatism and pericarditis, indeed, are so wedded, and heart disease so common, that no question of greater importance can attract the attention of the thinking portion of the Profession through the columns of your valuable journal.

I am, Sir, &c., Charles Kidd, M.D.

Kingsland Crescent.

Exhibition of 1851.—Mr. Erasmus Wilson has been appointed Chairman of the Sectional Committee for the exhibition of surgical instruments. No gentleman more acceptable to the Profession could have been selected; and we doubt if, among the many publications which we hear are in preparation for this congress of art and science, any will be found to surpass in beauty and excellence Mr. Erasmus Wilson's work on Skin Diseases.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Dr. J. R. Bennett, President, in the Chair.

HYPERTROPHY OF THE HEART.

Dr. Snow submitted to the inspection of the Society some morbid parts from the body of a man whom he had visited with Mr. Marshall. The patient, who was between fifty and sixty years of age, had been somewhat intemperate; he was accustomed to lift heavy weights in his occupation of porter. He had suffered for the last two years from anasarca, with albuminous urine, and from cough and difficulty of breathing. The lungs were emphysematous throughout. There was hypertrophy with dilatation of the heart to a great extent, without disease of the valves, except a a little opacity of those of the aorta. Whilst filled with coagulated blood before its removal, the heart measured nearly fifteen inches in circumference, and five inches and a quarter from apex to base. After being emptied of blood and washed, it weighed nineteen ounces and a half. The walls of the left ventricle were an inch in thickness. The kidneys were somewhat advanced in granular degeneration, and the liver presented a nutmeg appearance, the centres of the lobules being of a dark colour. He considered that the dilatation and hypertrophy of the right cavities of the heart were occasioned by the obstruction to the pulmonary circulation offered by the emphysema, whilst the same state of the cavities on the left side was due to impediments offered to the circulation in the systemic capillaries, by the impurities which the diseased kidneys were unable to remove from the blood. The renal affection was probably a primary disease caused by intemperance, but must have been increased by the obstruction to the circulation through the lungs.

IMPERMEABLE STRICTURE OF THE URETHRA.

Mr. Henry Smith exhibited a specimen of diseased bladder and urethra, which had been removed from the body of a gentleman, aged fifty, who had suffered for many years from inveterate stricture of the urethra, and had ultimately died of dropsy. The patient had been under the care of some of the most eminent surgeons in London, who had made many attempts to pass instruments into the bladder; but of late no catheter could be got in, and the patient suffered most intensely from the stricture. None of the urine came away by the natural passage; but the whole was passed by a fistulous aperture on the dorsum of the penis, just in front of the pubes. On three or four occasions lately, before his death, careful attempts had been made to get into the bladder, but they all failed. On examination after death, the bladder was found greatly thickened, and there were several cysts in it which contained small concretions. On passing a small probe through the urethra from the external meatus, it was found to travel in two directions; namely, both through the natural way, and also through a passage which commenced in front of the bulb on the right side, and passed for more than an inch through its substance. The patient, during his lifetime, stated to Mr. Smith that one of the surgeons who had treated him, had, after making many fruitless attempts to pass a catheter into the bladder, on one occasion given him excessive pain, and produced considerable bleeding, and he at that time considered that a false passage had been made, for he had felt the instrument go to the right side, and ever since this period he suffered much more. Mr. Smith did not bring this case forward merely as a pathological specimen, but it was of considerable interest in reference to a mode of treatment which Professor Syme had brought forward; namely, that of passing a small grooved instrument through the urethra and cutting down upon it and dividing the stricture. He considered that this case showed the danger and inexpediency of such an operation, for in this instance it would have been impossible to know where the staff was going, whether in the right or wrong passage. He had an opportunity of showing to the Fellows of the Society the instrument which Professor Syme uses, a friend from Edinburgh having kindly sent him one. They would see that the staff was very small and strong, and might be pushed anywhere if sufficient force were used; and, if an unnatural passage existed, as in the case before them, it would be very easy for the surgeon to pass it in that direction, if he cut down upon it; in that event great mischief might ensue.

Dr. Crisp believed that the operation recommended by Mr. Syme would have saved the patient's life if it had been had recourse to.

Mr. Smith replied, that the patient died from dropsy from cirrhosis of the liver. He had mentioned the case to show, that, if Syme's operation had been performed, the false passage would probably have been opened, and dangerous consequences would have resulted.

Mr. Chippendale thought that Mr. Syme's statement, that he had never met with an impassable stricture, was correct, as he himself had always succeeded, although not at the first sitting. He used a sound, and not a catheter. A good knowledge of the parts was requisite for the surgeon to be successful.

Mr. B. Childs had found, that patience and perseverance would enable the surgeon to overcome the difficulties in stricture of the urethra.

Mr. Canton recommended the use of Avery's speculum, which, by means of a metallic reflector and a strong light, would enable the surgeon to detect the opening in the stricture, and also the existence of any false passage.

CROWING INSPIRATION IN INFANTS.

Mr. Cox then read a paper on the crowing inspiration in infants. He commenced the subject by remarking the great frequency of nervous affections during infancy. He then proceeded to examine the *causes* of the crowing inspiration. These were, *predisposing*, *exciting*, and *proximate*. The *predisposing*,—any such as affect the healthy condition of the spinal marrow, the malady being one not of the cerebro-spinal, but of the true spinal system; in fact, a morbid exaltation of the reflex function. The strumous diathesis, female sex, and the practice of artificial feeding, were considered to be the chief. And any *exciting* cause, frequently in operation, must eventually disturb the equilibrium of the nervous centres, and produce permanent irritability, thus becoming a predisposing cause. Sleep, (or rather sudden awakening,) passion, terror, screaming, &c., were centric causes of the disease. The *exciting causes* are eccentric, consisting of irritation of various incident nerves, principally the trifacial, pneumogastric, and spinal nerves. The author considers the *trifacial* as most frequently at fault, and illustrated this by stating that painful dentition was almost always present. This is in opposition to Dr. Reid's views, who considers the pneumogastric most frequently the source of irritation. The author believed diseases of the cutaneous surface, such as eczema, often the source of morbid action. He then made some remarks on the pathology of the disease, contending that it consists in spasm of the laryngeal constrictors, and not in paralysis of the dilators, as held by Dr. Hugh Ley. He could not conceive how paralysis could possibly explain the tetanoid condition of the glottis, nor how paralysis could be so suddenly induced and removed as is the spasm in laryngismus stridulus. The author also expressed an opinion, (founded on observation and autopsy,) that in no case is the disease dependent on morbid changes within the head. All cerebral symptoms are to be considered as the result of suspended respiration,—the effects, and not the cause, of the malady. The author then, at some length, endeavoured to trace an analogy between the crowing inspiration and epilepsy; the chief arguments being,—1. That the symptoms are identical in type. 2. That persons who in infancy are affected with the one frequently become subjects of the other in adult age. This was stated from personal experience. 3. Epileptic patients often suffer from a suffocative spasm of the larynx at the onset of a seizure. The *symptoms* were then briefly touched on, and a few of the most important noticed; the *premonitory signs*, in addition to those usually observed at the coming on of all convulsive affections, being (as he stated) an unusual condition of pulse, very slow, full, and irregular, and obstinate clenching of the thumbs on the palms. It was also interesting how, during the attacks, other and remote parts of the diastaltic system were influenced. Tenesmus, strangury, and obstinate closure of the sphincters, were often noticed. The author next (after objecting to the names generally given to the malady, and proposing to substitute a new one, viz., "suffocative laryngeal spasm") proceeded to consider the different modes of treatment. The chief remedies he advocated were —chloroform inhalation during the paroxysm: citrate of iron, as a tonic, during the intervals; and lancing the gums and hydrocyanic acid to subdue the irritable condition of the spinal cord, after all sources of irritation connected with the excitor nerves had been removed. He largely dilated on the necessity for the latter remedial agent, and its great efficacy; he had rarely witnessed its failure. The dose was $\frac{1}{4}$ of a minim three times a day for a child three years old, increased (if necessary) to $\frac{1}{2}$ a minim. Dose of the ferruginous tonics as large as the system will bear. Change of air, and the substitution of good breast milk for artificial food were also important auxiliaries. As regards prophylactic treatment, he considered the chief to be regulation of diet, attention to the state of

the gums and alvine secretions, (deprecating, however, the frequent use of purgatives,) and avoidance of all undue mental or bodily excitement. The author then read reports of his cases, twelve in number. Of these eight were females, and nine of decidedly scrofulous diathesis. Five had been dry-nursed. With the exception of three, all these cases were treated successfully with the chloroform and hydrocyanic acid. In one of these three cases there was aneurism of the aortic arch, revealed by the autopsy; in another, no lancing of the gums was permitted, and no *post-mortem*; and, in the third, the patient had received a fall on the vertebral column two months previously, causing myelitis. The *post-mortem* examination showed vascularity of the cord and its membranes, a thin layer of fibrine on the dura mater, and the arachnoid opaque and thickened. In most of the successful cases, the removal of evident sources of irritation cured the disease for a period, but it was generally found to return, in consequence, as the author contended, of the cause becoming persistent and centric in the medulla spinalis; hydrocyanic acid was then given, and always effected a permanent cure.

Some discussion followed, in which Dr. Willshire, Dr. Golding Bird, Dr. Winslow, Dr. Snow, and others, took part. The views advanced by the author, Mr. Cox, were generally approved of, and the application of chloroform during the fit was regarded as a useful novelty.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. Latham in the Chair.

Mr. Prescott Hewett presented two specimens of

ANEURISM OF THE MITRAL VALVE,

and a third specimen, in which the appearances so exactly resembled this affection that they were at first mistaken for it.

In the first preparation, two well-marked aneurismal pouches existed in the anterior flap of the valve; the larger pouch, of the size of a filbert, was situated close to the attachments of the chordæ, and formed a projection into the left auricle; the smaller one, situated a little higher up, presented a jagged opening which measured four lines in its greater diameter and two in its lesser; the pouch itself, of a vermiform appearance and six lines in length, projected also into the left auricle. The internal membrane of the ventricle was perfectly continuous with that lining these pouches, both of which still presented some remnants of coagula. The apices of both aneurisms had been destroyed, having apparently been cut off. In this case, the middle aortic valve presented a large ulcerated opening, the margins of which were covered by long soft vegetations; the other valves were somewhat thickened, as well as the root of the aorta, by atheromatous deposit. In the second preparation, the aneurismal pouches were much smaller, but still well marked, two in number; they were situated in the anterior flap of the mitral valve, nearer to the aortic opening. They were partly covered with the remnants of coagula, and projected slightly into the auricle. The mitral and aortic valves were covered with long and very soft vegetations. In presenting these preparations, Mr. P. Hewett regretted that he had no notes of the history of the cases. Having been requested by Dr. Peacock, he had brought them forward, as they were well-marked specimens of an affection which was considered as somewhat rare; but he added, that, in addition to the cases now before the Society, he had met with four or five others of a similar nature. In the third preparation, the only one of the kind which had fallen under Mr. P. Hewett's notice, the anterior flap of the mitral valve presented, towards the centre of its ventricular surface, an opening of the size of a pea, with perfectly rounded margins, leading into a cavity, which at first appeared to be that of a small aneurismal pouch projecting into the auricle. On further examination, however, these appearances were found to be produced by a coagulum of blood, which had become adherent to the margin of the opening in the valve, while in the centre of this coagulum there was a small cavity occupying nearly its whole length; one side of the coagulum was easily detached from the opening, and the true nature of the appearance was at once made evident. The mitral valve was otherwise quite healthy. The heart itself was dilated in all its cavities, and its muscular structure, much atrophied, was flaccid and easily lacerated. This preparation had been taken from an elderly gentleman, who died of acute inflammation of the membranes of the brain, and had never presented any heart symptoms.

CARCINOMA OF THE LUNG.

Dr. Risdon Bennett exhibited, for Mr. Middleton, a specimen of carcinoma of the lung. A person, aged 27, had an acute attack of pleurisy in October, 1847, which yielded readily to treatment. In March, 1848, he was under treatment for secondary symptoms. The following year, in April, he had a second severe attack of acute pleurisy, from which he recovered in about five weeks. December 1st, he was suffering from cough, expectoration, night sweats, and emaciation; there was dulness on percussion at the upper part of the left lung, and but little air entered that organ. There appeared every indication of solid deposit taking place; this spread downwards so rapidly, that, on the 16th January, (six weeks afterwards,) it was pronounced to be effusion into the pleura, so perfectly dull now was every part of the left chest. The expectoration soon ceased whilst the patient was taking cod-liver oil. On the 9th February, the diagnosis was supported by a second opinion, and he was treated more actively, but the disease remained stationary. His general health improved, but the complete dulness remained, with absence of respiratory murmur. After being five months in bed, on the 7th of May he left town, his appetite improved, and he gained flesh, and in a short time could walk three or four miles. He returned in August, without any alteration in his chest symptoms, but complaining of a tumour, about the size of a walnut, anterior to the left ear, attended with considerable pain, and two smaller ones on the left side of the head. They were of a malignant nature, and quickly increased in size. The pain in them became distressing, preventing sleep; he had two or three attacks of loss of consciousness, and was for a time imbecile. At the beginning of November he was expectorating copiously an offensive matter, which rendered the room almost unbearable. There was no doubt gangrene had taken place. He died on the 14th.

Examination.—The right side presented adhesive bands between the surfaces of the pleura, allowing, however, free play to the lungs; its upper lobes were emphysematous, but otherwise healthy; the lower one was affected by gangrene. The left lung was connected by firm adhesions to the walls of the chest. The whole lung was solidified, the upper third forming one solid mass of malignant disease, pressing upon all the large blood-vessels, and obliterating the left bronchial tube within an inch and a-half of its origin. There was also an enlarged bronchial gland at the bifurcation of the trachea, containing calcareous matter. There was no fluid in the cavity of the pleura.

PHARMACEUTICAL SOCIETY.

Mr. Ince, President, in the Chair.

AMERICAN ANTIDOTE AGAINST SNAKE-POISON.

Dr. Pereira submitted to the meeting a specimen of cedron seeds (seeds of *simaba cedron*) from Panama, in South America. These seeds have long been used, and with great confidence, by the native doctors of Panama, as an antidote against snake-poison. The reputation they have thus acquired has recently attracted attention in France, where it is said a great congress of medical men is appointed to be held next month, for the purpose of testing, by experiment, the virtue of this celebrated remedy, and two gentlemen, M. Auguste Guillemin and M. Hippolyte Fournier, Professor of Mathematics of the department of Arvegron, have offered themselves to be operated upon. It is announced that all the different States of Europe will be represented at the congress. The remedy is proposed to be applied also for the cure of mental disease and epilepsy. Notwithstanding the interest which has been thus excited on the Continent, by the descriptions given of the wonderful effects produced by the *cedron*, Dr. Pereira appears to have very little faith in its efficacy, at least in such cases as those referred to.

The following is Dr. Pereira's description of the cedron:—

"The specimens of the seeds and fruit which I possess were brought a few months ago from Panama, by a gentleman (not a

medical man). They were given to him by W. Barrington, Esq., an English surgeon at Panama. To the taste these seeds are intensely bitter, and, doubtless, like the bitter barks and woods of other simarubaceous plants, (*e. g.*, *Quassia* and *Simaruba*,) they possess the properties of bitter tonics, and might be useful in dyspepsia, and perhaps even ague. Notwithstanding the faith of the Panama doctors, I am afraid there is not a shadow of hope that these seeds will prove an antidote against snake-poisons; all the reputed antidotes to snake-poisons having hitherto proved unworthy of trust when used under the eye of competent observers."

ON TRUE OIL OF ORIGANUM.

Mr. Daniel Hanbury read a paper on this subject, in which he pointed out the fact, that the essential oil met with in commerce in this country, under the name of oil of origanum is not obtained at all from the origanum plant (*origanum vulgare*), but from the *thymus vulgaris*. Mr. Hanbury's attention had been first directed to this subject in a tour through the South of France, when he had the opportunity of collecting some of the plant in the department of Gard, where the oil is distilled, and specimens of the plant and oil were brought to this country. The plant was examined by Dr. Lindley and Mr. Bentham, and was pronounced to be *thymus vulgaris*, and the oil was found to be identical with the oil of origanum of English commerce. In the district in which it is made it is called oil of thyme; and, indeed, this name is very often popularly applied to it in this country, but most of our writers on materia medica have represented it as an incorrect appellation, and indicated the origanum plant as its true source. Mr. Hanbury has subsequently had the origanum plant submitted to distillation, and a specimen of the oil was laid before the Society. It is essentially different from the oil met with in commerce.

ON LITMUS.

A paper was read on this subject by Dr. Pereira, being a continuation of a previous communication. The Doctor finds that nearly all the specimens of cake litmus met with in commerce contain indigo, in addition to the true colouring matter on account of which it is used as a test. Having found this contamination in the litmus sold by respectable dealers in this country, he obtained some specimens from a manufacturer in Holland, nearly all the cake litmus being made in that country; and these specimens, with the exception of one, were also found to contain indigo. The specimen devoid of indigo was sold at a much higher price than the others, but did not appear to be proportionally rich in the peculiar colouring matter of litmus. A great many different sorts of litmus are made in Holland, no less than nineteen specimens, at different prices, having been sent to Dr. Pereira by the manufacturer referred to.

THE NEW DUBLIN PHARMACOPŒIA.

The discussion on the alterations introduced into the "Pharmacopœia" recently issued by the Irish College of Physicians, was resumed by Mr. J. J. Griffin, who, in reference to the subject of weights and measures, suggested, that if any change were made from the system now established by law in this country, it would be desirable to adopt, as far as possible, a decimal system, and to make the different denominations of weight and measure to accord. He also offered some valuable suggestions with reference to the regulation of the strength of diluted acids, alkaline solutions, and other strictly chemical preparations used in medicine, proposing that the strength of such preparations should be indicated by *degrees*,—a degree always representing the *equivalent* or combining proportion of the substance.

This discussion was adjourned to the next meeting.

MEDICAL NEWS.

Royal College of Surgeons.—The following members of the College, having undergone the necessary examinations for the Fellowship, were admitted by the Council, on Thursday last, "Fellows" of that Institution:—

Ancram, William Rutherford, Valparaiso, South America; diploma dated Oct. 11, 1839.

Lane, James Robert, Grosvenor-place; May 28, 1847.

Orsborne, John, Bitterne, Southampton; Jan. 10, 1840.

The following questions in Anatomy and Physiology, submitted to the candidates, were omitted in our journal of last week:—

1. Describe the minute structure of bone.

2. Describe the apparatus for the excretion of the bile, the composition of the fluid, and the purposes in the economy of this secretion.

3. Describe the ganglia connected with the three divisions of the fifth cerebral nerve, their size, situation, their roots and offsets.

4. Describe how you would expose the trunk of the internal maxillary artery, its course, relative position, and branches.

5. Describe the disposition of the pelvic fasciæ in the male.

6. Describe the structure of muscle, explaining the difference between the muscular fibre of organic life and that of animal life.

The following questions on Pathology and Surgery were submitted to the candidates:—

1. Describe the injuries which occur at the shoulder-joint, and how they are to be distinguished from each other.

2. Describe the swellings met with in the groin, and how they are to be distinguished from each other.

3. In what forms of secondary syphilis is the use of mercury advisable? Describe the modes of administering this remedy, indicating that which is to be preferred, and the precautions requisite during a mercurial course.

4. Under what circumstances and to what joints is excision of the articulating extremities applicable? What objections may be taken to this operation?

5. When, in operating for strangulated hernia, the bowel is found in a state of mortification, partially or wholly, what treatment is to be adopted, and how does recovery take place under these circumstances?

6. Describe the operation for the removal of stone from the urinary bladder by lithotrity, the cases to which it is adapted, and those to which it is not.

Military Appointments.—73rd Foot Walton Hooke Bolton, gent., to be Assistant-Surgeon vice Alex. John Fraser, who resigns.

Naval Appointments.—Surgeon Alexander Bryson, M.D., (1836), and Assistant-Surgeons James N. Derriman, M.D., (1835) for service in the dock-yard, and James Jenkins, M.D, (1841) to the Fisgard flag-ship at Woolwich.—Assistant-Surgeon Thomas H. Huxley (1846) to the same ship for special service.—Surgeon Archibald Little, M.D., (1848) to the Volcano steam-vessel at Woolwich.— Andrew Moffit (1849) to the Penguin, 6 gun-brig at Devonport.

Obituary.—At Ordnance-place, Chatham, on the 1st inst., Patrick Brodie Esq., late Assistant-Sugeon, 13th Light Infantry.—On the 6th inst., at 36, Paternoster-row, John Goss, Esq., Surgeon, in his 52nd year.—On the 28th ult., at Dover, Sir Wm. Whymper, M.D., aged 65. Sir W. Whymper was present at the battles of Oporto, Talavera, (where he was taken prisoner,) Busaco, Vittoria, the passage of the Bidassoa, the siege of St. Sebastian, battle of the Nive, and at Waterloo. He had received the war-medal with five clasps. In 1825 he was Surgeon-major of the Coldstream Guards, and, in 1836, retired on half-pay. He was knighted in 1832.—On the 10th inst., at 63, Hoxton Old Town, George Thos. Heath, M.D., aged 67.

Dr. Rowland has resigned the appointment of physician to the Bloomsbury Dispensary. Dr. Steggall has declared himself a candidate for the vacant office.

Dr. Stevenson Bushnan has accepted the appointment of Senior Physician to the Metropolitan Free Hospital in Devonshire-square. Mr. Borlase Childs will probably be appointed Surgeon to this excellent institution.

Metropolitan Convalescent Institution.—This admirable charity has lately received new life from the munificent gift of five acres of land by Lord Ellesmere. It is proposed to erect a larger and more suitable asylum. For this purpose, about 12,000*l.* will be required, of which 3,000*l.* has already been obtained.

Queen's College, Birmingham.—We learn that Her Majesty the Queen has commanded Colonel the Hon. C. B. Phipps to communicate to Mr. William Sands Cox, the Dean of the Faculty, Her Majesty's most gracious intention to confer on this institution an especial mark of Her Majesty's Royal favour, by the presentation of a copy of Winterhalter's magnificent portrait of Her Majesty, which, by Her Majesty's Royal permission, recently graced the Exposition of Art and Manufacture, in aid of the funds of the Clinical Hospital in connexion with that Society. The portrait is to be placed in the New College Hall.

Guy's Hospital.—We understand that the authorities of this hospital propose adding a new wing next summer, and are now engaged in raising the funds for this purpose.

India.—At Peshawur a good deal of sickness is said to prevail; 1700 men and 30 officers were laid up with fever. One regiment had

400 in hospital. At Lahore, there were 27 officers and 148 men on the sick list. Nineteen of the European officers had died during the month, and the corps had in all seven officers and 331 men in hospital out of 850, with about 100 convalescent. It is believed that the sickness is abating.

The Polytechnic Institution.—We were induced the other day casually to step into the hall of the Polytechnic Institution, less with the object of seeing anything that might present instruction to the members of the medical Profession, than with the hopes of an agreeable recreation to, and relaxation from our editorial labours. Agreeably, therefore, were we disappointed, for while we secured the latter, we had an opportunity of witnessing several objects of the highest interest to all, and specially exciting to the members of the medical Profession. Some of these, we believe we are correct when we state, are not to be met with any where else in Europe. We would particularly call the attention of our medical brethren to the gymnotus electricus, which like the torpedo and silurus electricus, are distinguished from all other animals by the electrical apparatus with which their organisation is furnished. The shocks given by the gymnotus, it is said, are sufficient to kill a horse. Dr. Faraday, indeed, has established, on unquestioned evidence, the high amount of electricity it is capable of discharging. The Polytechnic Institution is the only place in the old world where that most extraordinary production of the animal kingdom can be seen. Its physical structure and history is one of the most extraordinary phenomena in the wide economy of nature, connecting and concentrating, in a most surpassing manner, the organic and inorganic properties of matter. The characteristics of the animal are described with great precision and fidelity by the attending demonstrator, and the whole history of it is interspersed with various exciting and interesting anecdotes. It was fied during the exhibition, and by its electric shock destroyed a fish. Being a native of a warm climate, it is preserved in a glass frame of warm water, which is constantly sustained at the requisite temperature, and renewed by a very neat adjustment of apparatus. We would recommend most strongly every member of the medical Profession to go and see this wonderful specimen of the animal creation; it is a specimen altogether *unique*. The hydro-electric machine, with all the beautiful display of electrical experiments which it furnishes, must be seen to be appreciated. We confess to a total ignorance of the magnificence, grandeur, and power of its action, until we had an opportunity of witnessing it in the lecture-room of the Polytechnic Institution. The able and talented lecturer Dr. Bachhoffner, in a very neat and concise manner, explained the leading principles of electrical action; and the numerous experiments which he offered as illustrations were all most successful. The lectures on chemistry are very happily devised so as to afford no inconsiderable degree of sound scientific information, accompanied by illustrative experiments both interesting and amusing. Each lecture is complete in itself; and the lecturer leads, by a very neat and progressive series of experiments, to the general idea of the nature of the fiery ordeal, (the subject which he handled when we were present,) and of the delusions which were practised under its authority and sanction. He demonstrates palpably before the eyes of the spectators, that the naked human hands can be prepared and protected so as to handle molten lead with impunity. Without wincing in the smallest degree, he plunged his finger into a ladle of that metal perfectly fluid,—that is, to a temperature of 612° Fah.; and his fearless assistant dipped his hand into the ladle unscathed, laving it as if it had been water at the ordinary temperature. Among the infinite varieties of models and apparatus, the medical student will find two magnificent and gigantic models of the human eye and ear.

Latest Psychological News from America!!—At the instance of the American Government, Dr. Forbes Winslow is preparing an analysis of the English law of lunacy. Dr. Winslow is requested to make any suggestions that may, in the course of the inquiry, occur to him relative to alteration and amendment of the said law. We trust, when Dr. Winslow's labours are concluded, that a copy of his inquiry will be submitted to the British Government, in order that they may have an opportunity of adopting any valuable suggestions it may contain for an improvement of our own defective laws in regard to the arrest and detention of persons said to be insane.—*Weekly Chronicle.*

HEALTH OF LONDON DURING THE WEEK.

The mortality of London, during recent weeks, has undergone unusual fluctuations. The deaths registered in the four weeks of November were successively 921, 908, 1016, 861; in the week ending last Saturday they rose again to 1004. In the ten weeks corresponding to last of the years 1840-9, the average was 1128; but this number is much increased by the influenza, which prevailed towards the end of 1847, when, in a single week, the deaths amounted to 2454. As compared with the previous week (ending November 30th) the present return shows an increase both in the epidemic class of diseases, and in affections of the respiratory organs, the deaths from the former rising from 196 to 229, and those from the latter class (exclusive of phthisis), which were 160, being now 208. Amongst epidemics, small-pox is remarkable for a suddenly augmented rate of mortality; after increasing by small degrees till it numbered 14 deaths, the present return shows that it was fatal last week in 27 cases, two of which occurred to persons above 15 years of age. The sub-district of Christ-church, Marylebone, has been already noticed as a locality in which the complaint was rife, and where six deaths from it had occurred in a week. The same registrar now reports four deaths from small-pox, all, like the six others, in Lisson-grove, one of which happened to a girl aged 16 years, and another to a female servant, aged 29—the latter case being described in the medical certificate as "variola, after vaccination at six years of age (no mark left on the arm)." Hooping-cough also has become more fatal; it carried off 33 children in the previous week, and 50 in the last, three-fourths of whom had not completed their second year. Influenza was fatal to three persons of advanced age. Diarrhœa and dysentery number 25; typhus, which among epidemics presses with more equal severity on old and young, numbers 43 cases. A medical man, who attended a fatal case of typhus in Wink's-buildings, Chelsea, describes the place as "pestilential in the extreme," and adds, that "six other cases of fever have occurred in the same house."

MORTALITY TABLE.

Deaths in the week ending Saturday, Dec. 7, 1850.
(Metropolis.)

Causes of Death.	Dec. 7. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	472	313	218	1004	11284
Specified Causes	467	313	217	998	11214
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	180	35	14	229	2417
Sporadic Diseases:					
Dropsy, Cancer, and other Diseases of uncertain or variable seat	4	19	16	39	517
Tubercular Diseases	43	97	6	146	1723
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	42	22	46	110	1249
Diseases of the Heart and Blood-vessels	2	31	12	44	380
Diseases of the Lungs, and of the other Organs of Respiration	107	44	57	208	2579
Diseases of the Stomach, Liver, and other Organs of Digestion	22	31	12	65	602
Diseases of the Kidneys, &c.	1	7	2	10	96
Childbirth, Diseases of the Uterus, &c.	...	5	...	5	102
Rheumatism, Diseases of the Bones, Joints, &c.	1	6	1	8	89
Diseases of the Skin, Cellular Tissue, &c.	1	...	1	2	12
Malformations	3	...	...	3	19
Premature Birth and Debility	33	2	...	35	218
Atrophy	16	...	3	19	123
Age	...	...	47	47	688
Sudden	3	2	...	6	104
Violence, Privation, Cold, and Intemperance	9	13	...	22	266
Causes not Specified	5	...	1	6	70

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Dec. 7, 1850.	Sum of Ten Weeks.
London...	1948369	1004	11284
West	301189	151	1547
North	376568	191	2061
Central...	374199	179	2162
East	393067	201	2600
South	503346	282	2914

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	22	Heart	41	Phthisis.....	113
Bronchitis	88	Hooping-cough ...	50	Pneumonia	86
Cholera	0	Hydrocephalus ...	18	Scarlatina	35
Childbirth	3	Influenza	3	Small-pox	27
Convulsions	32	Liver	16	Stomach	7
Diarrhœa	21	Lungs	8	Teething	9
Dropsy	16	Measles	23	Typhus	43
Erysipelas	7	Paralysis	30	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	789	494	275
Females	769	510	279
Total.....	1558	1004	554

METEOROLOGY OF THE WEEK.

	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...
Electricity.*	Positive electricity, with moderate tension, was shown on Dec. 6th, at 9 A.M., and on Dec. 7th, at 9 A.M. Nothing was shown at any other time during the week.							
Rain in Inches.	0·02	0·00	0·00	0·05	0·00	0·00	0·00	SUM 0·07
Amount of Horizontal Movement of the Air.	Miles. 80	125	80	90	70	30	15	SUM 490
General Direction of Wind.	P.M. E.	S.E.	S.S.W. & S.S.E.	S.W.	S.W.	S.E.	E.	S.E.
	A.M. N. & N.E.	E.S.E. & S.E.	S.S.E.	S.S.E.	S.W. & S.S.E.	S.W.	Calm.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	— 6·4	— 0·7	— 1·8	+ 5·3	+ 9·6	+ 2·0	+ 0·5	+ 1·2
Ditto. Dew Point.	33·9	37·7	37·9	45·2	48·8	41·6	39·2	40·6
Mean of Thermometer. Dry.	36·9	42·3	40·5	46·5	50·1	41·7	39·9	42·6
Mean of Barometer.	30·100	30·172	30·050	29·982	30·187	30·290	30·240	30·146

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

The Clinical Lecture delivered by Mr. Fergusson at King's College is unavoidably postponed.

[To the Editor of the Medical Times.]

SIR,—As we should receive with some degree of limitation all correspondence coming through questionable channels, and as I observe one of this genus in your Journal of December 7, from a deluded disciple of Hahnemann, in the person of T. Mackern, M.R.C.S., Clapham Common, I beg leave to ask him, through your medium, to enlighten your numerous subscribers (not by a decillionth quantum) from what College and date he derives his title; for, although I have a List of the Royal College of Surgeons up to August, 1850, yet I have been unable, even by the aid of my spectacles, to discover such name, or any one resembling it. If he should happen to have been a Member prior to that date, it is his place to see that he is properly recorded; if since, we should think little of his infinitesimal lore.

I am, &c.,

FERRET.

[To the Editor of the Medical Times.]

SIR,—Will you oblige me by inserting the following instance of the ingratitude to which our Profession is sometimes called to be the sufferers. The following instance, which may not be uninteresting to many of your readers, occurred to-day in my own practice:—

Twelve months since I engaged to attend Mrs. B., the wife of a saw maker, in her confinement, stipulating to attend her for the minimum fee of 10s. 6d. without medicines. Accordingly, when the hour arrived, I attended, when she was safely delivered of a son, much to the apparent joy of the father. Matters went on smoothly for the first week, when, having made too free, she took cold—inflammation ensued, which required constant attention and medicine for three weeks to subdue. For this I charged £1 17s.: the husband not feeling disposed to pay it, I summonsed him in the Sheriffs' Court, when he had the audacity to swear that the 10s. 6d. for the confinement was to include medicine and attendance until her recovery; consequently, Mr. Russell Gurney ordered a verdict for the defendant, and thus saddled me with the costs. But things did not stop here. Two months after the recovery of the wife, the infant was seized with infantile pneumonia, and was attended and supplied with medicines for five weeks: for this I charged £1 14s. 3d. Having again had recourse to summonsing for this amount, the same judge refused to listen to the case, and ordered me to pay the man 5s. for his attendance. Now, in the latter case, I was provided with two witnesses,—the one to prove the delivery of the medicines, and the other to prove that they actually promised to call and pay my bill, and yet I am unjustly defrauded of my rightful account. Such, I trust, will prove a lesson to me, how I stipulate in my attendance on confinements for the future. In the present instance, the man, or rather his wife, has received attendance for two months,—been supplied with medicines for the recovery of herself and child, amounting to £3 11s. 3d.,—and the husband has received a premium of 5s. extra, for his attendance at the Court.

The above statements are pure facts, and I leave the Profession to judge what gratitude they may be led to expect, in return for their attention and kindness, and what sympathy we are likely to meet with amongst a certain order of the community. Trusting that, as your excellent pages are always open to the oppressed members of our ill-remunerated Profession you will give this insertion,

I am, &c.,

80, Minories. FRS. RAWLE, Surgeon, and L.A.C.

Inquirer.—Your case of eye disease is, in all probability, similar to the disease alluded to by Mr. Haynes Walton, in our last, and which was described at length by our Irish Correspondent (No. 542, Vol XXI.) Dr Jacob's views of the disease, we believe, have been quite confirmed by microscopic examination.

H. N.—An account of the extraordinary case in America of the iron rod going through the head, just published with plates, was described in the "Medical Times," July, 1849. We are still a little doubtful about our friend Jonathan's stories.

Constant Reader, Bath.—We believe Mr. Faraday's experiments, as yet, merely rudimentary. His opinion is, that oxygen is capable of being rendered magnetic like iron: that oxygen and nitrogen are in opposite conditions,—oxygen attracted by the magnet, nitrogen repelled. Heat destroys this property in oxygen; hence, he thinks, the diurnal movements of the magnetic needle.

O. P. Q., St. John's Wood.—We are not aware; but we should say, the excellent and obliging Librarian to the College of Surgeons' library, Mr. Stone, would procure the information.

MEDICAL FEES—CIRCULAR TO AGENTS.

[To the Editor of the Medical Times.]

SIR,—The Directors of this Society (the Union Assurance), in accordance with the wish of many Members of the Medical Profession to receive a fee for each Certificate furnished for a Life Insurance, have agreed to allow the same to be paid in the district of your Agency when required.

The fee, however, is to be received by you, in the first instance, from the party proposing the Insurance, and returned in case the Life is not accepted by the Directors; or, if accepted, it may be deducted from the amount of Premium paid on completing the Insurance.

I am, &c.,

THOS. LEWIS, Secretary.

Zeta.—The first psychological magazine published in Europe was, we believe, in Germany, about half a century ago. Copious extracts from it will be found in Chrichton on "Mental Derangement."

Psyche.—Our Correspondent is right. The term "psychology" ought properly to be limited to speculations upon the *soul*. The adjective "psychological," applied to material forms or substances, is misplaced. Psychological medicine is nonsense.

Mr. Hore, of Shoreham.—Our Correspondent has both "a moral and legal title to treat" a surgical case. His claim would be admitted in a court of law. As his opponent takes such high ground, Mr. Hore should write to the College of Physicians, the College of Surgeons, and the Society of Apothecaries, to ascertain his qualification, and when the fact is known the proper steps can be taken. We do not remember to have heard of a grosser insult offered to a brother practitioner, and if evidence can be procured of libellous observations having been made by the doctor, in reference to Mr. Hore's character, skill, or qualification, an action would lie against the offender.

F. C., Bow.—We are not in the habit of recommending any particular surgeon for the treatment of a special case of disease. Any well-educated surgeon would be qualified to relieve the malady under which our Correspondent labours.

P. L.—Our Correspondent would impose upon us a task most invidious in the performance. We have already in preparation a series of sketches of deceased medical men, which, when published, we have no doubt will be of great interest and moral value to the Profession. Perhaps our Correspondent will, upon second thought, see reason to agree with the poet who wrote—

> "If a live lion, as 'tis said,
> Be worth two lions that are sped,
> One doctor living must be worth two dead."

In all soberness, we are of opinion that it is impossible to write an honest biography of any living person; and this difficulty increases exactly in proportion to his success in life, and the number of friends he has grouped around him. The only mode of obviating such difficulty is for the hero to write his own eulogy, as surely none can know his merits so well as the man himself. We believe that this plan has been recently adopted in various instances, though after all with very poor success.

COMMUNICATIONS are acknowledged from HIS GRACE THE ARCHBISHOP OF DUBLIN; Dr. CHAMBERS, of Hill-street; the ALLEGED LUNATICS' FRIEND SOCIETY; Mr. GIRDLESTONE, of John-street, Bedford-row; Mr. EBSWORTH, of Bulwell, Notts.; Dr. KIDD, of Kingsland-crescent; Mr. J. D. BROWN, of Haverford West; Mr. CARTER, of the London Hospital; Dr. FORBES WINSLOW, of Albemarle-street; Mr. HOLMES COOTE, of St. Bartholomew's Hospital; Mr. GEORGE SAUNDERS, of the 47th Regiment, Buttevant; Dr. WILLIAMS, of Upper Clifton-street, Finsbury; Dr. MUNRO, of Moffat; Dr. DICK, of Ravenscourt Villa, New-road; Dr. D'ALLEX, of Brook-street; Mr. M. J. MOORE, of the Queen's Hospital, Birmingham; Dr. WEBSTER, of Brook-street; Mr. REDWOOD, of Bloomsbury-square; ZETA; A MEDICAL STUDENT; PSYCHE; F. C., Bow; Mr. HORE, of Shoreham; P. L.; INQUIRER; H. N.; CONSTANT READER, Bath; O. P. Q., St. John's-wood; FERRET; FRS. RAWLE, L.A.C.

ORIGINAL LECTURES.

CLINICAL LECTURES ON SURGERY,

AT

KING'S COLLEGE.

By W. FERGUSSON, Esq., F.R.S.

OBSERVATIONS ON HARE-LIP AND CLEFT PALATE; AND ON LITHOTOMY.

I have, on a previous occasion this session, in one of my clinical lectures, made some observations to you on the subjects which I intend to bring before your notice this day, —namely, hare-lip and cleft palate,—affections which are closely associated together; and, as we have now under our notice a case of each, which have presented features of interest and instruction, it will be well if I address some further remarks to you on the nature and treatment of these deformities.

There is no necessity for me at present to dwell at any length upon the treatment of ordinary cases of hare-lip, you have so many opportunities of seeing it. There is, however, a case now under our care, which has differed from many we have hitherto had under notice, and where an addition to the usual mode of treatment has been made, which you have not seen before. The case is that of the little girl just brought before us, on whom I performed the operation on November 16. It was more especially interesting, as an operation had been put in force on two previous occasions, and the fissure in the lip, which was a simple one, had not united on either occasion. The late Mr. Liston was one of the gentlemen who operated, and this is a sufficient guarantee that everything was done that could be for curing the deformity; but, from some cause which cannot be explained, union did not take place, and the affection still remained. It will happen every now and then, that success will not follow this operation, although it has been judiciously conducted, and it is impossible to account for this want of success. Whatever may have been the cause for it, no benefit accrued to this little girl from either operation, and the father brought her to me for the purpose of having my opinion on the matter, he being anxious to have the deformity remedied, if possible. One of the objects he had in consulting me was, to have my opinion concerning the advantages of a particular apparatus for assisting in keeping the parts more securely together after the operation. He is a very ingenious person, and had invented this apparatus; moreover, he had undergone an amputation of the leg, and had devised for himself a very effective artificial limb. Reasoning upon the failure of the operations on his child's lip, he thought that if some instrument could be applied, which might keep the edges of the wound closer together, success would follow. I was pleased with the instrument, and considered that it was admirably adapted for the purpose of keeping the parts together, and counteracting the tension which is exerted upon the edges of the fissure. The apparatus differs from others in general use, because, instead of drawing the parts towards each other, it, as you readily can perceive, *pushes* them together. On that account it is superior to those ordinarily used, as they generally act by pulling the parts together, and it is difficult, in using them, to keep the pressure from the cicatrix; thus there is an objection to them. The idea of pushing the parts together is excellent. The drawing, by Dr. Westmacott, represents the apparatus applied. The inventor's name is Hainsby, and he lives in Denton-street, Somers-town.

As the father was particularly anxious that this instrument should be worn after the operation, and as no harm could possibly occur from its use, I determined to comply with his wishes. After having operated in the ordinary manner, I applied the apparatus and desired it to be kept on. The result has been most satisfactory; for, although on the two previous occasions failure had occurred, union is now complete in every point. It is not improbable that this would have occurred, even if this apparatus had not been employed, for the uniting of the wound may depend upon some favourable change having taken place in the girl's constitution since the last operation was performed; nevertheless, I am of opinion that the cure in this instance was owing in some measure to the ingenuity of the patient's father; and I would recommend this case to your consideration, for there are instances of hare-lip in which a surgeon will not like to operate in consequence of the great amount of tension which will be exerted upon the edges of the wound, which will almost with certainty burst open again. Now, in such cases, an apparatus of this description, and acting in this manner, will be of essential service. Its great advantage is, that it can be easily borne by a child, whereas, with those ordinarily employed there is great difficulty in getting the patient to bear them on.

Having made these few observations respecting this case of hare-lip, I shall now call your attention to an affection somewhat analogous to it, namely, that of cleft-palate. A case of this description is now in the house, and it also has presented features of interest greater than what are ordinarily attached to cases of the kind. The subject of the case was Stephen Meek, a young man with a cleft running through the soft tissues and implicating, to some extent, the hard palate as well. He was sent to the hospital in the middle of October. I deemed it a very good case for the operation which is now always performed by me, and which I may call my own, as I was the first to explain its utility and to put it in force. Some of you are aware that the operation essentially consists in the division of certain muscular fibres, which enter into the formation of the soft palate, and which exert peculiar actions upon it. These I will explain to you more fully by-and-bye. To return to our patient. When he first entered the hospital he was seized with a febrile attack, and I was obliged to defer the operation until November 7th, on which day it was performed. There was not more than the usual amount of bleeding during the proceeding, but, unfortunately, hæmorrhage took place from the wound about half an hour afterwards, and went on to such an extent that Mr. Luxton, the house-surgeon, was compelled to apply a strong solution of gallic acid to the part. This checked it, but the patient had been considerably exhausted by the excessive bleeding. The consequence was, that the actions necessary for the union of the wound did not go on well; some unhealthy inflammation occurred, and at one time I was afraid the whole would burst open again. When I came to examine it a day after, I found that the lowermost stitch had disappeared, and at that part there was a very unhealthy condition. The bleeding had probably burst the stitch, and it is not impossible that the gallic acid, which had been applied for the purpose of restraining it, had had some effect not favourable to the healing of the wound. The fissure did not open up the whole way, but, happily, only at the lower part. Healthy union had taken place in the greater portion, and I was yet in hopes to bring it about at that portion where it was deficient. After waiting a few days, until the parts had assumed a better appearance, I introduced another stitch, and scraped the edges of the cleft with the point of the knife. A fortunate result has ensued, for we find, on looking at the man to-day, that a most healthy union has taken place; and, in fact, it is a very good case altogether. There is a small aperture in front which I fear cannot be closed, as the hard palate is to a certain extent implicated,

—this, judging from my own experience, cannot be helped in such cases.

You will recollect that this man was in the hospital some three weeks before the operation was performed. I delayed it, because he was suffering from a feverish attack which came on a day or two after he was admitted. Now, it was extremely lucky that I did not perform the operation when he first came in, because, in all probability it would have failed. Union would not have taken place during the constitutional disturbance which existed. The failure would, doubtless, in this case have been attributed to the operation alone; but in reality, had it been done at that period, and had union not taken place, it would have been owing to the condition which the system was in, which you now perceive was quite an accidental occurrence. It shows us, however, how careful we should be, in never performing operations which can be deferred, whilst there is any feverish or unusually irritable condition of the system.

I shall now, gentlemen, call your attention to the nature of the particular operation itself which I have employed in this case, and which is usually employed by me for the cure of cleft palate. In former days, the operation for cleft palate, as practised by Roux and Graëfe, was so unsatisfactory, that some surgeons would not undertake it. I was led by this want of success to investigate the subject with care, and some years ago I brought before the Royal Medico-Chirurgical Society the results of these investigations. By anatomical demonstration, I showed as clearly as could be exhibited, that it was the actions of certain muscular fibres upon the edges of the cleft which prevented the wound from uniting after operation, as they had a tendency to draw the edges apart. It was suggested to my mind that the division of these fibres would materially contribute to the success of the operation. I satisfied myself, and demonstrated to others, that the levator palati was the muscle which had the chief action upon the flaps in this cleft condition of the palate. When these views were first brought forward by me, it was objected, that the action of the tensor palati was not taken sufficiently into account. Mr. Liston was one of those who thought in this manner, until he saw the preparation which I now have in my possession, and on which I dissected the parts in the cleft condition. There are other surgeons now who entertain the notion, that it is the tensor that exerts the chief power in rendering tense the palate, and that the division of this muscle is necessary. But they have been misled by the *name* which has been given to it; and it is a matter of astonishment to me how it is that they entertain this notion, after they have examined the muscles of the palate in the normal condition, and more especially after having inspected them in the cleft state.

In the natural condition, when you come to look at the bellies of the *tensor* and *levator palati*, they appear to be equally strong, but a mere glance at these muscles in the natural state even is sufficient to show that, in reality, the latter has a much more extensive sphere of action than the former, which from its name may be supposed, by those who have not sufficiently examined into the matter, to act strongly in rendering tense the soft parts; but its action is very limited indeed. I do not object to the nomenclature, for what action it does possess is to render the palate tense, but it is much less visible than is that of lifting by the levator, which, indeed, lifts and draws outwards, and particularly so when there is a fissure in the palate and the flaps are loose. I am perfectly satisfied that it is this muscle chiefly which influenced the results of the operations, and caused failure.

Now, gentlemen, there is no theory about these views; the condition has been clearly demonstrated; and, if you examine my preparation before spoken of, you can see the action of the muscles, and can satisfy yourselves beyond a doubt that it is the levator, and not the tensor palati, which acts so strongly, and which it is necessary to divide in order to perfect the operation of staphyloraphy.

With respect to the management of the sutures in this case after operation, I pursued a course somewhat at variance with what I have done before. It is customary to withdraw them in about forty-eight hours, and it was formerly my habit of doing so;—but it is not improbable that this early removal may have in some way caused failure in the very few cases which have not succeeded with me. Latterly I have left them in longer, and my own experience of a great number of cases tells me to let the stitches alone so long as they seem to be of any use. In this case, as they appeared to be doing no harm, they were not taken out until the tenth day, when perfect union had taken place at all points except where the lowermost one had given way, This mishap has been remedied by the subsequent introduction of another, which has now also been removed.

Among the cases recently under treatment, you have seen a case of stone in the bladder. The patient's name is Wm. Bannatyne, aged 52; and you will remember that I performed the operation of lithotomy upon him on the 7th of November, not yet three weeks since. The case in itself, as compared with those of a similar description, offers no remarkable feature for special attention at the present, unless, indeed, we refer to the absence of all suffering since the operation was performed, and the rapidity with which the wound has healed. From the operation until now, with the exception of a slight chill and subsequent acceleration of the pulse for two days, he has enjoyed immunity from any evil effect; and I have rarely seen the wound in such cases heal so rapidly. Perhaps I may make an exception in one respect. This man had hæmorrhage from the wound and from the bladder on the eleventh day after the operation to such an extent as to induce the house-surgeon to send to me. I have seen this occur in other instances about this date, and have never observed any evil after-effect. I was, therefore, not alarmed, and I trusted to the spontaneous cessation of the hæmorrhage, which, as you have seen, actually occurred. Probably this kind of bleeding comes from a few exuberant granulations in the wound near the neck of the bladder. Every now and then examples occur wherein the wound heals, in a manner, by the first intention. This has not been an instance of that sort, however, for it has gone through the usual processes of suppuration and granulation. On looking at this wound some days after the operation, it seemed to me smaller than I usually make the external incision in such cases. We must not suppose, however, that the small wounds heal quicker in such cases than the larger ones. This result is more likely to depend on the state of the patient's constitution. In this instance the patient seemed to be in the best possible state for such an operation, and probably that is the chief reason of the very satisfactory result. As regards the length of the external incision, perhaps the thinness of the patient had influenced me at the time, although I can scarcely say I was conscious that I was making a particularly small opening. But in thin persons I do not consider a free external incision of such importance as in those who are fat. Where the perinæum is shallow, as in thin persons, you can readily get at the bladder and stone so as to complete the operation in a satisfactory manner; but in fat persons, if you limit the external incision, you are likely to meet with great trouble in dealing with the prostate gland and stone, and in all such cases I recommend a very free external wound, for the purpose of permitting the easy accomplishment of the most important steps in the operation,—which I conceive to be notching the neck of the bladder, seizing and extracting the stone. I think it worthy of remark, that I do not attribute the success here to the thinness of the patient; on the contrary, so far as my experience goes, I am disposed to think that those who are very fat make better recoveries than others. But in anticipating the result of any case of lithotomy, we are so uncertain what it may be, that we cannot look upon the operation without being impressed with its hazardous character. Of course there are conditions of the system conjoined with stone in the bladder which deter the intelligent surgeon from any operation, but, even in cases where all things seem in favour of success, the result is unsuccessful, notwithstanding the sanguine anticipations of the surgeon. Such has been the experience of all lithotomists, I believe; such I know to have been the experience among those whose practice I have had the opportunity of witnessing; and such also has been my own personal experience. Often when I have looked for the most happy result, the reverse has occurred,—and again, when from peculiarities I have been uncertain, the issue has been most favourable. Without entering far into such an interesting and extensive question, I shall, on the present occasion, limit my observations to the case before us, and one which we had in the house some months ago, and which some of you had the opportunity of seeing under treatment. The patient's name in this case was Luff, and lithotomy was performed in his case also, but with a very different result, for

he sank directly afterwards, and died on the third day from the operation, the result being clearly attributable to this proceeding. Now, in some respects these two patients were similarly placed; they were nearly of an age, about the same bulk of body, and in much about the same state of health. In Luff's case, however, there was this difference, that proof had already been afforded that he could bear considerable injury to the bladder without any subsequent mischief. This circumstance had been ascertained in his previous history, for I had frequently used lithotritic instruments prior to lithotomy, and done so with such freedom as must have produced both contusion and laceration. He invariably soon rallied from these operations, but the fragments came away so tardily, that both of us, in a manner, got tired of this mode of treatment, and I had little hesitation in advising lithotomy. I imagined that, from the proofs given of the slight effects of injuries in and about the neck of the bladder, the operation of lithotomy would not likely cause much more effect than the proceedings with the lithotritic instruments. I do not here mean to draw a comparison between the injuries inflicted during lithotrity and lithotomy. I have a strong opinion — one, I presume, very generally entertained — that lithotomy is certainly more severe and more fraught with danger than lithotrity; but, on that question we need not dwell at present. I only refer to the circumstance as affording some proof that this man was comparatively a proper subject for lithotomy. I was wrong, however, in my anticipations; and some of the features of these two cases are worth notice, as showing how uncertain the result of this operation may be. In Luff's case, I think I never performed the operation with greater facility, and with less amount of violence or injury of any kind beyond what is usual to the operation. It so happened that there were ten stones, (fragments, doubtless, of the original stone, with new incrustations upon them,) which happily I seized with one grasp of the forceps, and removed with a force scarcely more than sufficient to lift the weight of them and of the forceps. The whole proceeding was over in little more than a minute, and saving that there was the wound made by the knife, I actually considered that less, as regards injury likely to produce mischief, had been done than in any single previous operation with the lithotrite. In Bannatyne's case, on the contrary, the operation was performed with considerable comparative violence. The external wound happened (as already referred to) to be small, and the stone was of large dimensions, being about two inches in one diameter and one and a half in the other. I missed the stone in my first attempt to seize it. I had to pass my finger into the bladder to secure it near the wound, and when I did seize it I had it in the least favourable position for extraction. Under all these circumstances, especially as some twisting and dragging were applied in extracting, the operation was, I imagine, accompanied with much more temporary mischief to the parts, and yet no evil resulted. These two cases, therefore, show how little we can trust to the result from pre-conceived opinions, or even as regards the actual performance of the operations. I have often thought, as regards my own practice, that I have been more successful in instances where I have not performed the operation well, than in those cases where I have done the operation to my own entire satisfaction.

CLINICAL LECTURE

ON

THE OPERATIONS FOR STANGULATED HERNIA WITH AND WITHOUT OPENING THE SAC,

THEIR RELATIVE ADVANTAGES AND DISADVANTAGES.

DELIVERED AT

THE WEST HERTS INFIRMARY,

MONDAY, DEC. 16, 1850.

BY T. SPENCER WELLS, R.N., F.R.C.S.

GENTLEMEN,—You know that during the last few weeks I have attended as honorary surgeon at this institution, in compliance with the request of the noblemen and gentlemen who compose the Committee of its governors. A permanent surgeon having been now elected, I am anxious, before giving up charge of my patients, to bring before you a few practical observations upon cases which some of you have attended, in order that the results of our experience may not be lost, but may be impressed upon our own memories, and possibly prove serviceable to others.

The case upon which I propose to make some comments to-day is one of considerable interest. The patient was seen with me by Mr. Steel, the senior surgeon of this hospital,—the oldest fellow or member of the College of Surgeons, the coadjutor of the late Sir Astley Cooper in the foundation of this establishment,—whose presence here to-day I need not say I consider as a very high compliment, and whose kind and cordial assistance in several operations I have lately had to perform have merited my warmest thanks. It is not often, gentlemen, that one sees a medical man who has practised for more than fifty years in one neighbourhood,—who has passed his life in doing good,—attentive alike to rich and poor,—esteemed equally by both—the friend of one class, the idol of the other, the benefactor of all. We see him here to-day, however; and let me express a hope that the example will not be lost upon us, and that we shall so act as, in our turn, to merit such love and respect as greet the benevolent face before us whenever and wherever it is seen.

To return, however, gentlemen, to the subject of my lecture: The patient was a groom, twenty years of age. I saw him early one morning, suffering from all the signs and symptoms of strangulated hernia. It appeared from his statement that the strangulation had taken place eight or ten hours before, and while in great pain from this cause he had exercised a restive horse. He had not noticed the tumour in the groin, although it was as large as a hen's egg. He fancied it was merely a bad stomach-ache, and had drunk a good deal of hot brandy and water. He had suffered several times before in a similar manner, but less violent degree, the symptoms spontaneously disappearing in two or three hours, but he had never worn a truss. For about two hours I attempted reduction by the taxis, with the usual auxiliary means, without success, keeping him for a considerable time also under the influence of chloroform, as the tumour was exceedingly tender. All my efforts were unsuccessful. I, therefore, at once proceeded to divide the stricture. I divided the coverings of the sac in the usual manner, and then I endeavoured to return the intestine without opening the sac. It was very clear that the intestine was tightly constricted at the internal ring, and I cautiously divided every fibre of every tissue between the ring and integuments, sometimes by insinuating the nail of my forefinger beneath the fibres, sometimes by passing a grooved director under them and cutting down into the groove. I am quite certain that I divided everything anterior to the sac, and fairly passed the director into the abdomen, still external to the peritoneum. Notwithstanding this I could not reduce the hernia, and I was accordingly obliged, very much against my will, to open the sac. On doing so about an ounce of turbid serum escaped, and a fold of intestine from three to four inches in length was seen lying in immediate contact with the testicle, which was below but not behind the gut. There was but one sac. The case was, therefore, clearly one of congenital bubonocele. The testicle had never descended into the scrotum, and it was not larger than a filbert. The intestine was bright rosy red in colour, and partly covered by a film of semitransparent lymph. I endeavoured very carefully to draw it downwards, but could not do so. The stricture was in the neck of the sac itself, and very tight. I pressed back the intestine, however, with my forefinger, and, using the nail as a director, readily divided the stricture. The neck of the sac had been laid bare, as I told you, by the previous incision, so that there it was clearly and distinctly before our eyes, the sole impediment to the return of the protruded intestine. After its division a livid ring was seen round the intestine, as narrow and defined as if a piece of string had been tied round it, but it did not appear to be gangrenous. I therefore at once, and with perfect ease, returned the intestine, closed the wound partially, and applied water dressing, leaving the testicle in its old situation, the canal. You know the result of the case: that the peritonitis which had been set up before the operation could not be checked, but went on increasing, and that the patient died thirty-six hours after the operation.

There are many points, Gentlemen, in this case well worthy of attentive consideration. The existence of hernia unknown to the patient—the use of chloroform as an auxiliary to the taxis—the proper time for operating in cases of

strangulated hernia—the peculiarities of the form of congenital hernia before us—the condition of the constricted intestine—the seat of actual stricture—the manner of dressing the wound—and the subsequent medical treatment, would all afford subjects for lengthy comment. But I must pass them all over in order to direct your attention to one matter of paramount importance—the question whether, in operating for the relief of strangulated hernia, the sac should or should not be opened.

This question, Gentlemen, has been of late years the occasion of long and frequent debates, and some entire works have recently appeared, in which the most opposite opinions are advocated by surgeons of considerable reputation and large experience. One of the most able of metropolitan hospital surgeons, a cool, clear-headed, cautious observer, and most dexterous operator, Mr. Luke, of the London Hospital, has brought forward his extensive experience in support of the plan in which the sac is not opened—the plan of Petit, revived in this country by Mr. Key, the late lamented Consulting Surgeon of this Hospital. On the other hand, Mr. Hancock, of the Charing Cross Hospital, has published a work in which he advocates the doctrine, that, as a general rule, the sac should be opened. Let us examine, therefore, the grounds upon which these conflicting opinions are supported. Let us see if we can avoid extremes on either side, and adapt the good points of either plan to the varying cases which may come before us in practice.

Now, in the first place, let us inquire what are the dangers generally believed to depend upon opening the sac? Secondly, are these dangers avoided by not opening the sac in cases where it is possible to divide the stricture without making this opening? Thirdly, how far is it generally practicable to divide the stricture without opening the sac? Fourthly, what are the dangers we incur by doing so, or by attempting to do so, and how far do these dangers compromise the safety of the patient, as compared with those which solely arise from opening the sac? Lastly, how shall we decide in any particular case whether to open or not open the sac?

First, What are the dangers consequent upon opening the sac? We all know the difference between a penetrating and non-penetrating wound of the abdomen, between a case of simple incised wound of the abdominal parietes, and one in which the peritoneal cavity is also opened. We know that the one case is a comparatively trivial, and by no means dangerous one, while the other is one of the most serious and alarming nature. A little local uneasiness, and some slight febrile disturbance, is all that usually occurs, or can reasonably be anticipated in the one case, while in the other we have a well-known assemblage of threatening symptoms, small low pulse, pale, anxious countenance, cold extremities, extreme weakness, great pain, vomiting, hiccough, and convulsions. I do not mean to say that in every case of wound of the peritoneum, such extreme effects are produced, but I do say, that in every case I have ever seen or read of, they were observed to a greater or less extent. I am speaking of wounds of the abdomen, in which the peritoneal cavity is opened, but in which there is neither internal hæmorrhage, nor escape of fæces from a wounded intestine, and I do say that, in all such cases, experience teaches us that the danger of peritonitis is very great, that its occurrence in some degree is almost certain and inevitable. I do not care whether it is the simple injury to the peritoneum which causes it to inflame, or whether the inflammation is caused by the entrance of air. What now interests us is the fact, that whenever the peritoneal cavity is opened by a wound, peritonitis will almost invariably follow, and very frequently to a dangerous degree. Now, in opening a hernial sac, we really make an incised wound of the peritoneum. It may be said, that the sac is a mere process of the peritoneum, a detached portion of the membrane, less liable than other parts to take an inflammatory action. But once open this sac, once divide the stricture, and we have an external wound communicating directly with the general peritoneal cavity, and we as commonly and certainly observe symptoms of peritonitis after such opening and division as after simple penetrating wounds of the abdomen. We see precisely the same symptoms during life, whether the hernial sac be opened by the surgeon, or the peritoneal cavity by accidental injury; and in fatal cases we observe exactly the same morbid appearances after death. It is peritonitis which kills the patient in either case, and in both we find its traces in the effusion of serum and lymph, and in the adhesions of the viscera to each other and to the abdominal parietes.

Again, when the sac is opened there is danger of hæmorrhage and of wounding the intestine. These are of far less moment than the danger of peritonitis, and may be considered as almost nothing when the patient is in the hands of a careful surgeon. If the surgeon examines everything he divides before applying the knife, he can never wound a vessel of any consequence. Indeed, I believe you will have some difficulty in finding a case on record in which a patient clearly died from the effect of hæmorrhage after herniotomy. The danger of wounding the intestine is somewhat greater. I have seen it take place more than once when the operation was performed by surgeons of deservedly high reputation. Some sudden twist or start of the patient, some slip of an assistant's fingers, at a critical moment, has brought the edge of the knife in contact with the intestine, and irreparable mischief has been the consequence. The accident is not necessarily fatal, but it adds enormously to the chances against the patient. Unless under very peculiar circumstances, however, it must be considered more as the fault of the operator than as a danger necessarily connected with opening the sac. At the same time it is a danger which is *certainly* avoided by leaving the sac intact.

There is another danger consequent upon opening the sacs, which I am confident is of far more importance than many surgeons believe—I mean the entrance of the pus and secretions of the wounded parts into the peritoneal cavity—blood, serum, and pus in varying proportions and quantity are always found for some days about the wound made in herniotomy. In whatever position the patient lies, whether on side or back; however the wound may be dressed, whether stuffed with lint, or left to itself with water-dressing, or sealed hermetically from the air by sutures and strapping, I believe it to be absolutely impossible to prevent the entrance of some portion of the secretions of the wound into the peritoneal cavity, when the cavity and the wound have been brought into direct connexion by opening the sac. And I believe, further, that the irritation consequent upon this effusion into the cavity is a frequent cause of fatal peritonitis.

The second question now suggests itself, whether, supposing we are able to divide the stricture without opening the sac, we avoid the dangers I have just enumerated. There cannot be two opinions on this point with regard to the danger of internal hæmorrhage of wounds of intestine, and of entrance of the secretions of the wound into the cavity of the peritoneum. And then, as to peritonitis, it is quite clear that, if the sac be not opened, any inflammation which would have been set up by the wound of the peritoneum, or entrance of air, is avoided. More or less peritonitis is probably set up in every case of strangulated hernia before any operation is attempted; but there is no reason why this should be greater after division of the stricture external to the sac, than after simple application of the taxis.

The question, how far it is generally practicable to successfully divide the stricture external to the sac is one which can only be answered by statistics, and here satistics are unfortunately defective. My own impression, from what I have observed in my own operations, and in the practice of others, and from what I have been able to collect from books, is, that in femoral hernia not more than 1 case in 10 or 12 will be met with in which this cannot be done; while in inguinal hernia it will be found impossible in about a third part of the cases. In recent cases of umbilical hernia, I believe it will scarcely ever be necessary to open the sac; but in large old herniæ in this situation adhesions of omentum and intestine to each other will often render it impossible to remove the strangulation without an opening. I may tell you, that of 84 operations by Mr. Luke, he was obliged to open the sac in 25; of 20 cases of inguinal hernia he opened it in 13.

All that I have said hitherto, Gentlemen, might lead you to believe that I was an exclusive partisan of the operation external to the sac. But I have now to direct your attention to the dangers we incur by so dividing, or attempting to divide, the stricture. I have laid before you the dangers necessarily connected with the opening of the sac. I wish now to speak of those which follow operations performed without this opening, and from which the former method of operating is free. It very frequently happens, that protruded intestine and omentum are adherent to each other. When

this is the case it is necessary to destroy the adhesions, or at any rate to make ourselves perfectly certain that they do not interfere with the integrity of the intestinal canal, before returning either intestine or omentum. If either be returned without this precaution, the chances are that all the symptoms of strangulation will become more marked and severe, and the death of the patient be hastened. And you should be aware that these adhesions are not only met with in large herniæ of long standing, but also occasionally, though more rarely, in smaller and more recent protrusions. Again, in a small recent hernia, in which a portion of small intestine has been incarcerated for several days, it is no uncommon occurrence for the part in immediate contact with the neck of the sac to become firmly adherent to the neck. If we now attempt to return the gut without destroying the adhesion, the intestine merely becomes folded upon itself. The portion which was in the sac is returned into the abdomen, it is true, but the stricture still remains—the canal is still obstructed—all the evils of strangulation still persist. You must bear in mind, then, that by returning a hernial protrusion without examining its condition, you run the risk of returning it while still strangulated by adhesions either to the neck of the sac, to the omentum, or by contracted bands of effused lymph. Again, you may meet with a small recent hernia in a thin relaxed person, and, after dilating the structures around the ring, may very easily return both the newly-formed sac and its contents, these contents being still strangulated by a stricture in the neck of the sac. This has happened more than once. It also appears probable, that the sero-sanguineous or sero-purulent fluid often contained in the sac is of an irritant nature, and that if pressed into the abdomen it is a cause of peritonitis and enteritis. Lastly, the return of intestine in a gangrenous condition would be fatal. The patient would be far safer if left to the unassisted operations of nature, as in that case, what is improperly called an *artificial* anus, might save life.

You may now see that a surgeon who operated upon every case of strangulated hernia which came before him by opening the sac before dividing the stricture would run into one set of dangers, and a second, who never opened the sac, into another series. Either would invariably escape some dangers from which his opponent was free. The one diminishes the danger of peritonitis, and avoids altogether those of hæmorrhage, wounded intestine, and entrance of air, or the secretions of the wound into the peritoneal cavity; but he runs the risk of returning the protruded parts while still strangulated, or when in such a condition that their return would be fatal. The other is perfectly safe in these two latter respects, but, although by proper care he may avoid the evils arising from wounds of blood-vessels or intestine, he fearfully increases the risk of the occurrence of peritonitis—the chief cause of death after herniotomy. The question therefore resolves itself pretty nearly into the following terms:—Is the risk of returning strangulated parts, in the one operation, equal to the increased risk of peritonitis in the other? or, putting it conversely, Is the risk of peritonitis, consequent upon opening the sac, so great as that of returning protruded parts in a doubtful, strangulated, or gangrenous condition?

If we endeavour to arrive at a just appreciation of the comparative amount of these dangers by a statistical inquiry into the relative success of the two operations, we are, at the very outset of the inquiry, met by considerable difficulties. It is very easy to collect a number of cases operated on in one manner, and to give the proportion of deaths, as compared with a series of cases operated on after the other plan; but then comes the doubt as to the condition of the patient at the time of operating—whether he was not in such a state that either operation would have been useless, and death inevitable. Doubts will also arise, whether the surgeons operated with equal skill and care—whether they treated their patients with equal judgment after operation—or whether there were not circumstances with regard to the age and general health of the sufferers which influenced the result very materially but altogether independently of the effects of either operation. And it unfortunately happens, from the manner in which the results of experience are often recorded, that it is impossible to clear up such doubts. For instance, Dieffenbach, who had probably performed herniotomy more frequently than any other surgeon of any age or country, gives a mere general statement that he lost fifty patients out of between 650 and 700 operations. He does not state how often he opened or did not open the sac. But the tenor of his writings would lead to the belief that he opened it as a general rule, although, in cases of femoral hernia, he was becoming convinced that it was better not to do so. He gives no sort of numerical statement of his success in connexion with this important step in the operation. Mr. Hancock has collected from various sources 474 cases in which the sac was opened. Of these, 167 died, or rather more than 1 in 3; but then, on examining into the history of the cases, he came to the conclusion that 103 of them were in such a condition at the time of operating that they must have died whatever had been done. If these 103 cases, then, are taken away altogether from the calculations, the mortality is rather less than 1 in 6, instead of being rather more than 1 in 3. In the same manner he has collected 74 cases in which the sac was not opened, the deaths being 22, or 1 in $3\frac{1}{3}$. From them he deducts 5 in which the patients' death was independent of the operation, and the proportional mortality then appears as 1 in 4. Yet this great mortality under either operation, so frightful when compared with Dieffenbach's loss of only 1 in 13, is proved to be but too true by other inquirers. Mr. Luke tells us, that of cases reported in British journals in which the sac was opened, he found *one-half* of the patients died. Malgaigne's report of the Parisian hospitals gives 133 deaths to 220 operations—considerably more than one-half; and, on looking to reports of British hospitals, we find the mortality varying from one-half to 1 in 4. The reports of cases in which the sac was not opened are less numerous; but if we take Mr. Luke's cases, and those recorded by Mr. Teale and Mr. Gay, in their works on hernia, we shall not find the mortality to be greater than 1 in 9. In the cases examined by Mr. Hancock, as I told you, he calculates it as 1 in 4; but in those quoted by the other authorities just named, it is not greater than 1 in 9. All this should convince us, gentlemen, of the necessity which exists for some exact registry of cases occurring in all our hospitals, so arranged that the results could be easily attainable by any scientific inquirer. If we could only obtain authenticated notices of all the operations for strangulated hernia in the hospitals of Great Britain for one year, we should do a great deal towards the settlement of this important and much disputed question, and I hope the day is not far distant when some condensed summary, or systematic report, of all cases treated in every hospital, will be published annually. As it is, we must say that the facts before us are not sufficiently numerous to enable us to decide the question upon statistical grounds. We must, therefore, argue it upon other considerations.

Now, what is the mortality, when we are able to reduce a hernia strangulated, or apparently strangulated, without any cutting operation, by means of the taxis? We all know that it is very small indeed. Mr. Luke gives us an account of 447 such cases, of which only 13 died, or about 1 in 34, and I think if each of us looks to his own experience in this matter, we shall say that this proportion of deaths is quite as great, and probably much greater, than we have ourselves observed. Where then lies the cause of the frightful difference in the result of the taxis, or of the operation by opening the sac, the one 1 in 34, the other from 1 in 2 to 1 in 6? Simple incision of integuments, and of the fibrous coverings of the sac, could do little towards an unfortunate result. Wounding the intestine is a very rare occurrence. Fatal hæmorrhage is scarcely ever heard of. We now and then hear of a hernia being reduced in mass, the stricture still strangulating the hernia, but so rarely, that such a case is talked of as a wonder. And if we put aside those cases of long standing strangulation, in which the intestine or omentum was in such a condition at the time of operation, that the operation had nothing whatever to do with the fatal result, we find peritonitis to be the cause of death. It is peritonitis we have to dread, and to do all in our power to avoid. We have the full knowledge that a penetrating wound of the abdomen is almost certain to cause peritonitis in a healthy subject, and to insure it in a case where it is already commencing; and each one should ask himself, before opening the sac of a hernia, shall I make an opening into the abdomen of this patient, and thereby expose him to the risk of peritonitis? If I cannot return the hernia without, I have no choice—I must open the sac; but if I can, shall I run into the danger of peritonitis, rather than incur the risk of returning the hernia unrelieved from strangulation? For my part, gentlemen, I can only say that I would not. I consider the danger of

peritonitis *certain*—that of reduction in mass exceedingly small; and where I had the choice, I should never run into a certain or probable danger, even although that were small, to avoid a greater, which was only just within the bounds of possibility.

This brings me to the last question I proposed to discuss: In operating upon any special case, how are we to decide whether to open the sac or not? and in answering this I have only time to lay before you a few general maxims, without pretending to discuss them fully. In the first place, then, I would say, look to the time of strangulation as regards the probable condition of the intestine or omentum. Has this been long enough to render the intestine gangrenous?

Should the general condition of the patient, the state of the tumour, the colour and appearance of the integuments, and, above all, the existence of a fetid odour while making the incisions, favour the supposition of gangrene, then I say, by all means open the sac and examine the intestine before determining whether to return it to the abdomen or not. Secondly, I would add, never employ a greater amount of force or pressure to return a hernia, after dividing the covering of the sac, than you would when attempting to return it before such division. You thus avoid the danger of reduction in mass; and should such an occurrence take place, you would be able to recognise it by its suddenness, as compared with the gradual gurgling manner in which a hernia usually returns. In every case, then, in which moderate pressure sufficed to effect reduction without opening the sac, I would most carefully refrain from opening it. Thirdly, I would look upon the operation external to the sac as something between the simple taxis and ordinary herniotomy. When the taxis proved unsuccessful, I would divide the integuments and the fibrous tissues about the seat of stricture, and, provided there were no good grounds for belief in gangrene, I would return the intestine, if the employment of a moderate degree of pressure enabled me to do so. If I succeed, the patient escapes the danger of a penetrating wound of the peritoneal cavity; and if I do not, I can then complete the ordinary operation by opening the sac. I expose the patient to no danger by such trials, and I probably save him from the greatest of all the dangers attendant upon the operation. I adapt each operation to the cases to which it is suited, and avoid the evils of exclusively following either.

I intended, Gentlemen, to say something respecting two operations I have lately performed, one the very common one for the cure of hare-lip, the other a rare one, for the restoration of a defective urethra, but I have trespassed so long on your time that I cannot ask for further indulgence at present.

ORIGINAL COMMUNICATIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By Wm. JENNER, M.D. Londin.,

Licentiate of the Royal College of Physicians, Professor of Pathological Anatomy in University College, London, and Assistant-Physician to University College Hospital.

(Continued from page 621.)

SIXTEENTH PAPER.

GENERAL DESCRIPTION OF THE SYMPTOMS AND LESIONS OF STRUCTURE IN RELAPSING FEVER.

Relapsing fever affects persons of all ages. The patient, previously in health, is seized, on waking in the morning, or it may be while occupied about his daily avocations, with rigors, sometimes severe, sense of chilliness, and headache, usually frontal. These are followed by heat of skin; and this, again, is frequently succeeded by sweating; the sweating, however, when it occurs, appears to afford no relief. There is soon pain in the back and limbs, frequent pulse, and a dry and hot skin. The tongue is now white, the urine high-coloured, the appetite is lost, and there is considerable thirst. The patient passes sleepless nights. Vomiting of green bile is generally one of the earliest symptoms. The rigors, headache, vomiting, and pain in the back, might lead one to suppose the patient to be labouring under small-pox; but the pain in the back is rarely so severe, nor is the vomiting so incessant as it ordinarily is in the early period of the last-named disease. The headache is seldom so violent as it is in common "bilious headache," in which latter, moreover, it is commonly occipital; the heat of skin and the quick pulse serve still further to separate relapsing fever, at its outset, from that troublesome affection. The suddenness of the attack, the rigors, hot skin, pain in the limbs, and white tongue, distinguish relapsing fever from idiopathic head affections. The patient is generally obliged at once to take to his bed. He feels not exactly too weak, but too ill to keep about; frequently affirms only that he is too giddy to walk; *i. e.*, vertigo, and not sense of weakness, drives the patient to bed. The sudden transition from health to a sense of disease warns him that some severe illness is setting in.

By the second or third day, the heart often beats 100, 120, or even 130 strokes in the minute; the patient gets no sleep; and even, as in the case of William D., by the fifth or sixth day, may be violently delirious. The bowels are usually somewhat confined at the commencement.

After a period varying from five to ten days, a profuse perspiration breaks out, and in the course of a few hours the patient appears nearly well. The alteration is most remarkable: in the morning the pulse may have been 120 in the minute, the skin hot and dry, the head throbbing; in the afternoon the pulse is 60, the skin cool, the head free from pain.

On the following day the patient is apparently, in every respect, free from ailment. His appetite returns, his strength improves, and we suppose him progressing favourably; when, on from the 12th day to the 20th, reckoning from the outset of the illness, or on *about* the 7th, counting from the crisis, the patient having committed no hygienic error, the preceding day having been seemingly in health, or simply weak, is again suddenly seized with rigors, vomiting of green fluid, and headache, quickly followed by hot skin, quick pulse, furred tongue, loss of appetite, and confined bowels; delirium, perhaps, supervenes, and, in fact, he is in the same state as on the day his illness commenced. The pulse, which falls remarkably during the period of apparent convalescence, often beating, the day preceding the relapse, as infrequently as 48 strokes in the minute, rises suddenly to 120, or even higher. After the expiration of two, three, four, or five days, the patient is again bathed in perspiration, and the next day is convalescent.

Such is the ordinary course of a tolerably severe non-fatal case of relapsing fever. But in some cases it presents certain deviations from this, which may be regarded as its normal type. Instead of commencing abruptly, it may make its attack insidiously; *epistaxis* may be among the earliest symptoms; the crisis may be blended by diarrhœa, or loss of blood from the nose, and it is said, but I have never seen such a case, by discharge of blood from the bowels, instead of, as is far more common, by sweating. In women, the catamenial discharge appears, in some cases, to be critical.

The relapse may be very imperfectly marked; a slight, *even now and then only comparative*, increase in the rapidity of the pulse, and a little greater heat of skin than was observed on the previous day, being all that indicates its supervention.

If blood be drawn during the primary attack or the relapse, it is in many cases more less buffed, and that without the co-existence, so far as can be ascertained, of any local inflammation.

Yellowness of the skin is by no means an uncommon symptom.(a) The jaundice is sometimes intense; it may be present during the first attack, disappear before the relapse, and not recur; or it may occur only in the relapse. When jaundice supervenes, *the stools retain their natural hue, or are darker than common;* at the same time the urine is frequently loaded with bile.

The skin sometimes has a purplish mottled aspect, an exaggerated resemblance to the skin of young children. Petechiæ are now and then present—flea-bites, which often exist in immense numbers on the trunk and extremities of the poor, have frequently been confounded with them; at the

(a) Jaundice is a *very* rare symptom in typhus and typhoid fevers, so rare that I cannot call to mind a single case in which I have observed it, while it is more or less marked in nearly a fourth of the cases of relapsing fever.

same time, the large size in rare cases of the subcuticular effusions of blood, and the fact noticed by some physicians, that they have made their appearance after the patient entered the hospital, prove that they are due in certain cases to a change in the solids and fluids of the body, and not to the bites of insects.

Neither the mulberry rash of typhus fever nor the rose spots of typhoid fever are ever present in relapsing fever.

Sudden sinking marks the progress of some cases; it is indicated by a deep dusky hue of the face, lividity of the hands and feet, a purple marbling of the whole surface. The trunk feels cool, the hands and feet cold—the patient is in a state of collapse, without having suffered from any severe pain, or exhausting discharge. In such cases, he is unable to be aroused, to exhibit any sign of consciousness, and not unfrequently dies a few hours—generally from twelve to twenty-four—after the physician had supposed him to be free from danger. Death is, however, a rare termination of relapsing fever; when it does occur, the fatal event may take place during the primary fever or the relapse—I think the former has been in my experience more commonly the case.

Pain in the limbs of a very severe character is not unfrequent at the outset of the disease, but it has been noticed by several writers, and my own observations are in accordance with their experience, that severe muscular pains sometimes cause considerable suffering after the termination of the primary attack, and also after the relapse, *i. e.*, after the patient is, in all other particulars, in health.

More or less violent delirium is now and then observed, as Dr. Robertson pointed out, after the critical discharge has taken place.

Vomiting, as I have said, is a frequent symptom in both the first and second attack. The fluid ejected is ordinarily bright grass green, and very large in quantity. Sometimes the vomiting is almost incessant, and continues during the whole course of the disease. Tenderness at the epigastrium is a common symptom in all cases, but it is especially marked in those to which I have just referred.

If pregnant women are attacked by relapsing fever, a very large majority, if not all, abort. Death sometimes, but by no means invariably, happens under such circumstances.

A second relapse occurs in a few cases; the patient, convalescent about the 7th day, relapses about the 14th; is a second time convalescent by from the 17th to the 21st day; and relapses again from the 21st to the 25th days, for convalescence to be finally established from the 25th to the 28th days. However, in some cases, the disease terminates at the end of a week, the patient experiencing no relapse.(a)

The most frequent local complication, next to enlargement of the liver and spleen, is inflammation of the lung. I have never seen in relapsing fever, any more than I have in typhus fever, an example of meningeal or cerebral inflammation.(b)

Death from uncomplicated relapsing fever is rare. No anatomical character of this disease has been pointed out. The most constant lesion by far is enlargement of the spleen. The size attained by that organ is, I think, on the whole, larger than in either typhus or typhoid fevers. I have found it weigh as much in one case as 38 oz., its size being in proportion to its weight. Pale yellowish pink masses of variable size, firm to the touch, but friable, with a slightly granular fracture, are occasionally found in the substance and near the surface of this organ. As a rule, there is but little congestion of the lungs, the weights of which contrast singularly with the weights of the same organs in subjects dead from typhus fever. The brain and its membranes also are remarkably free from appreciable lesion. A slight excess of serosity beneath the arachnoid and in the lateral ventricles is, however, occasionally observed. The blood, in a few cases, has been found fluid throughout the body. The heart offers no appreciable deviation from its normal condition. The liver is generally large, and the gall-bladder contains a considerable quantity of thick dark bile; the ductus communis allows bile to pass freely into the duodenum even in those cases where jaundice was present at the time of death.

The gastro-intestinal, the laryngo-bronchial, and genito-urinary mucous membranes, present all the characters of health. The kidneys are normal.

This description applies only to uncomplicated cases; for, for should any local inflammation have been set up during life, the characters of that lesion will, of course, be present after death; thus consolidation of the lung and the signs of recent pleuritis are sometimes detected.

(a) For the relation existing between these cases and febricula, the reader must refer to the cases, &c., of that disease, to be published in a subsequent paper.

(b) The case detailed by Dr. Stevens, of Glasgow, in the *Medical Times*, Vol. XXI., p. 156, appears to me to have been an example of hæmorrhage into the cavity of the arachnoid.

ON THE DETECTION OF BLOOD-STAINS.

By BUTLER LANE, M.D.

The detection of blood stains may be of high importance in medico-legal investigations, and it is therefore very desirable for the medical jurist to ascertain how they may most readily be recognized. Taylor and others say, that there is much difficulty in forming an opinion on the subject, and therefore any additional aid thereto cannot fail to be acceptable. The microscope has not hitherto been much applied to the purpose in question, but, having lately been able to use it with much advantage, in a case of supposed infanticide, which induced me to make many careful observations, I now purpose drawing up a few notes in reference to the subject.

I shall first refer to the different means which have hitherto been adopted in order to ascertain the presence of blood, pointing out how far they are available, and in what respects they are fallacious; and I shall then endeavour to show to what extent microscopic examination may be useful, either by the special results which it may afford, or by confirming those obtainable by chemical inquiry.

Chemical examination chiefly has hitherto been resorted to for the purpose of detecting blood stains; and it may be efficient for that purpose if the blood exist abundantly. When, however, the quantity is small, even so minute as to be comprised in a small stain, the chemical evidence is certainly but of little value. Taylor says, "There is no direct chemical process by which blood can be identified, but we presumptively establish its nature, by determining the presence and properties of the red colouring matter." Suppose then the blood, whether on wood, steel, linen, or other material, to be obtainable in sufficient quantity to afford a coloured solution in cold distilled water, with which it readily combines, a rich red tint should then be apparent; for the blood, from its greater specific gravity, will tend to become precipitated, and consequently concentrated towards the lower part of the test-glass. This red colour will remain unaltered by the addition of a weak solution of ammonia,—a strong solution will occasion a brown tint. By boiling the blood solution, a muddy-brown flocculent precipitate is formed in proportion to the albuminous and fibrinous matters present; but the red tint is not altogether lost, at any rate in the first instance. On the other hand, red colouring matters derived from other animal or vegetable substances, assume crimson or green hues on the addition of ammonia; and, if in combination with serum or other albuminous solution, the red tint will remain quite unchanged on the application of boiling heat. If the red colour be owing to an animal or vegetable dye fixed with a mordant, it may be unaffected by ammonia; but then it is insoluble in distilled water, and unchangeable by boiling heat, and thus, therefore, readily to be distinguished from the colour of the blood. There are also other tests for the blood solution. An infusion of galls precipitates the red colouring matter of the blood; a weak solution of chlorine changes the red into green; while a strong solution throws down a white precipitate. Strong nitric acid occasions a brownish flocculent precipitate from the blood solution, and I find a solution of bichloride of mercury produces the same effect. Sulphuric acid has been recommended as a test, but I believe erroneously. These tests may therefore be useful in affording confirmatory evidence of the presence of blood.

The microscope may likewise be made available in testing the blood solution, by allowing it to stand in a small tube, and, after pouring off the clear supernatant liquid, placing some of the coloured matter which has subsided on a small portion of bibulous paper to be submitted to examination as I shall hereafter point out. Under very rare circumstances,

the microscope may even be made applicable to distinguish human blood from that of fishes, birds, and mammalia.

The recognition of human blood by the odour evolved on adding strong sulphuric acid, and even in its distinctive peculiarity in each sex, may be a possibility to the acute olfactories of our French neighbours, but to our more obtuse sensibility, it probably would not be practicable; and, at any rate, evidence based thereon would not readily be accepted in an English court of justice.

I shall now refer to the examination of blood stains *in situ*, to which our scrutiny may be principally limited if the quantity of blood be so minute that we are unable to obtain a notable solution; and my remarks will apply equally to stains on linen, silk, and other textile fabrics; also on paper, wood, and plaster. The local application of those tests to which I have already referred may be resorted to, the stained spot being first made damp with distilled water. Acids will have little or no effect on blood stains, with the exception of a greenish tinge from strong nitric acid; neither will they on vegetable colouring matter, beyond rendering them lighter, but ammonia will at once produce in the latter the distinguishing green or crimson tint we have already referred to, whereas it will produce no change on the blood stains except making them somewhat brighter. On red dyes, as before mentioned, ammonia may produce no effect, but they are generally insoluble in distilled water, or, if at all soluble, the application of heat to the solution in no way affects it, thereby readily distinguishing the colouring matter from that of blood. Stains of red paint will be insoluble in water, and, with appropriate tests, will generally manifest the presence of iron. Neither chlorine nor alum will discharge the colour of blood stains, but will convert it into a greenish brown. Soda and its carbonates will occasion a somewhat similar tint, but very strong solutions must be applied.

Iron-moulds vary in tint from a bright red to a pale brown, and can be distinguished from blood-stains beyond a doubt: their colouring matter is completely insoluble in water, but may generally be pretty readily removed with dilute hydrochloric acid. When, however, very slight or ancient, they may occasion some misgiving, more especially as old blood-stains are not always readily removable. To satisfy any doubts, therefore, the following process may be adopted. The spot and the surrounding surface is to be moistened with dilute hydrochloric acid, and subsequently a solution of ferrocyanate of potash should be applied, when, if it be iron-mould, a deep blue tint will at once pervade the stained tissue. If nitric acid be used instead of hydrochloric, a bright apple-green tint will result. A blood-stain, on the other hand, will remain almost unaffected under similar treatment, and probably would so entirely, but that hydrochloric acid is almost always contaminated with a small proportion of perchloride of iron, and consequently the whole surface moistened with the acid usually assumes a blue tint, which, however, will scarcely obscure the colour of the blood-spot; whereas, if it be a rust-spot, it immediately and most thoroughly assumes an intensely blue colour under the treatment in question.

The microscope will materially aid us in the examination of stains *in situ*, and a little careful comparison will not fail to correct or confirm our opinion in many important respects. A mere fibre of any tissue thoroughly stained with blood affords a peculiar hue and general appearance readily recognisable under the microscope as distinct from any other stain, however doubtful it may be to the naked eye. The blood-spot may be on any fabric, whatever be its colour; it will be as easily detected on a black silk or cloth as on white linen or calico. On paper, when faint, it is more difficult to recognise, and is more readily imitated with water-colours than under any other circumstances; but the fixed brilliant red of the blood-stain differs materially from the brownish or yellowish red, or rarely even a bright crimson, which the iron-mould will present. The red hue of the blood is very permanent; it does not readily fade, and, though it may be obscure and faint to the naked eye, it will become vividly characteristic when microscopically examined. Old blood-stains on floors which have undergone wear and washing for years may thus be identified by the examination of a small splinter of the stained wood. Experience and practice are essential to the application of the microscope for the purpose in question, and we shall soon gain confidence in the evidence which it will afford. It is true that in our inquiries on the subject it may be difficult clearly to explain why we pronounce a stain to be that of blood, and that our argument must be founded on a negative process of ratiocination, arriving at the conclusion that it is a blood-stain because it is like nothing else.

The detection of spots of blood on iron or steel is a matter of greater difficulty than we should be led to suppose by writers on medical jurisprudence. Unless the spot be large and thick, it cannot readily be detached, or, even if detached, it is not usually in such quantity as to be readily submitted to chemical examination. If, however, sufficient is obtainable, it ought to be soluble in water, and to afford the characteristic blood tint, even if rust or other insoluble matter be commingled with it, as they may readily be separated by filtration. If the stain of blood be very thin, so that it cannot be mechanically detached, Taylor recommends that the stained surface be laid on a piece of plate glass, on which a stratum of water has been poured, and so to obtain a solution. The supposed blood solution can then be submitted to the chemical tests already noticed; but if very dilute, will not afford any very satisfactory results. Rust, on the other hand, is insoluble in water, but soluble in hydrochloric acid, when it will afford the due reaction to ferrocyanate and sulphocyanate of potash. Rust stains may also be dissolved *in situ* with dilute hydrochloric acid, whereas blood spots will remain unaffected.

The examination *in situ* of the doubtful spots with the microscope will be found of the greatest service in determining whether they are occasioned by blood, rust, or ought else. I have already described the fixed red of the blood stain apparent in linen or any other fabric; this is no less recognizable on iron or steel, and the characteristic hues of rust are made yet more apparent, whether a brownish or yellowish red, or even the occasional crimson. The application of ammonia produces no effect on the colour of blood or rust stains, and thus they are readily distinguishable from any vegetable pigment. When adherent to iron or steel, blood assumes a very different appearance from that of rust; its physical arrangement is dissimilar, being more diffused and irregular, and not assuming a linear disposition, unless the instrument has been partially wiped, when all the blood may have been removed except that which has remained in the grooves occasioned by the linear formation of the metal. Rust, on the other hand, tends naturally to a linear arrangement, and also presents the marked appearance of a fungus-like growth, more especially if it has been undisturbed. When the surface is blood-stained, rust spots may often be detected, starting up in the midst and readily distinguishable by their peculiar colour and configuration. When, however, rust and blood are intimately commingled, it may certainly occasion a very perplexing appearance. The combination, however, will not fail to be detected by patient and persevering observation, whereas in such cases chemical examination is almost sure to prove unsatisfactory. We must remember that blood stains are more permanent than those of rust; that is, they are less liable to modification, not having the same augmenting corrosive tendency. By Orfila and others it is said that the stains produced by lemon juice may closely resemble those of blood, and such may be the case to the naked eye, but with the aid of the microscope there can be no difficulty in discriminating between the two—the rich reddish brown of the crust occasioned by lemon juice not having the slightest resemblance to the colour of the blood. If the surface of the iron or steel stained with the lemon juice be well wiped, we no longer have the colour of the citrate of iron apparent, but a dull grey tint, depending on the slight deoxidation of the metal. Thus, by microscopic aid, a dangerous fallacy is very readily obviated.

The artificial light of a good lamp, or even of a candle, is better adapted for the microscopic scrutiny of blood stains than that of the sun. The light should be strongly reflected on the object to be examined. Magnifying powers of 60 or 100 diameters, according to circumstances, will be found most available. The object stage should be so arranged as to be free from all tremor and unsteadiness, and at the same time so as to be moved with facility. The adjustment of the apparatus, as in all microscopic inquiry, is a matter of delicacy, and requires tact and practice to ensure uniform results; but I do not doubt that the recognition of stains of various descriptions may thus be readily accomplished, and those of blood be more satisfactorily identified, and in thus much the utility of the microscope will not fail to be acknowledged in medico-legal inquiries.

P.S. Since the above has been written, I perceive that in

an inquiry in a late case of suspected murder, as to the presence of clotted blood on the clothes of the accused party, Professor Taylor has availed himself of microscopic assistance to ascertain the fact, and that he has based his positive affirmative evidence entirely on the results so obtained. He seems to have identified the coagulated blood by its peculiar red colour and the smooth shining appearance of the surface, which he considered no other substance would afford. I am much pleased that this eminent jurist should now thus practically admit the value of the microscope in the identification of blood spots, as in his work on medical jurisprudence he is evidently unaware of its utility; and I trust he will allow my claim to the original suggestion thereof.

Ewell, Surrey.

THE LOCALITY OF OLD AGE AND CHOLERA IN ST. GILES'S.

By Dr. KING,

Medical Superintendent of Bilston and Darlaston, in Staffordshire, in 1832; and Superintending Medical Inspector of Lambeth, Newington, Camberwell, St. Giles's, St. Martin's, and the Strand and Holborn Unions, in 1849.

The statistical methods employed in my inquiry into the origin of cholera (see *Medical Times* of the 10th and 24th of August last) go far to prove that the disease is generated, not only by a local but by a gaseous poison.

The first process of investigation fixed cholera to its death home, a process original in its character, and suggested by a field of observation as laborious as it was extensive.

The mortality of St. Giles's for the whole period of registration, I have since tested in the same orginal way, a work sufficiently advanced at the present time to yield the mortal character of every house in the district.

And I now offer, as a further link in the chain of evidence in support of the gaseous origin of cholera, a comparison of the locality of old age and cholera; the one embraces the period from 1838 to 1849 inclusive, and the other the two visitations of 1832 and 1849.

The deaths from old age are 615, and range from 60 to 103, in the following proportions, the average being 75½ years:—

Age.	Dths.	Age.	Dths.	Age.	Dths.	Age.	Dths.
60	13	70	28	80	35	90	7
61	5	71	21	81	14	91	5
62	8	72	30	82	18	92	5
63	10	73	25	83	21	93	2
64	8	74	26	84	26	94	2
65	15	75	30	85	12	95	2
66	17	76	85	86	16	96	2
67	17	77	34	87	14	98	2
68	13	78	31	88	12	103	1
69	21	79	20	89	12	Total	615

The deaths from old age are distributed over 151, and those from cholera over 89 streets. In 68 the two forms of death find a home, in 83 the one, and in 21 the other form. In the 68 streets 301 houses are fixed with old age, and 254 with cholera, increased to 278, owing to the epidemics of 1832 and 1849 having attacked the same house in 24 instances, making the sum of 579, yet the two forms of death are so far antagonist to each other as to afford only 36 exceptions to the law that the two are not found in the same house.

Old Age and Cholera in same House.

Street.	Instances.		Street.
Brewer-street	1	1	Lumbar-court
Buckeridge-street	1	1	Little Coram-street
Carrier-street	2	1	Maynard-street
Charles-street	2	1	Museum-street
Church-lane	3	1	Neal's-yard
Colonnade	1	1	Nottingham-court
Cross-lane	1	1	Parker-street
Dudley-street	3	1	Phœnix-street
Dudley-court	1	1	Queen-street
George-street	2	1	Short's gardens
Great Wild street	1	1	Smart's-buildings
Kennedy-court	1	1	Star-court
King-street, Seven Dials	2	2	Wild court
King-street, Drury-lane	1	36	Total

Old Age and Cholera in same Street.

Old Age. House.	Street.	Cholera. House.
1, 11	Alfred-mews.	7
5	Barley-court.	4
14	Bainbridge-street.	1
9, 14, 16, 24, 31	Belton-street.	13
7	Bowl-yard.	5
2	Brewer-street.	2, 1
0, 1, 7, 12, 42, 44, 61	Broad-street.	47, 41, 30, 22
18, 21	Buckeridge-street.	29, 28, 26, 25, 24, 21, 13, 6, 8, 1, 0
3, 4	Burnett's-buildings.	5
3, 11	Carrier-street.	13, 11, 9, 3, 1
1, 5, 6, 8, 12, 25, 26, 30, 31, 35, 36, 37	Brownlow-street.	11, 3
2, 10, 23, 24, 30, 35, 47	Charles-street.	51, 44, 43, 42, 38, 36, 34, 32, 31, 28, 22, 17, 15, 14, 13, 12, 11, 10, 8, 2, 1, 0
3, 5, 6, 8, 11, 17, 23, 25	Charlotte-street.	2
3	Church-street.	26, 22, 21, 17, 11, 10, 8, 4
2, 9, 20	Church-lane.	28, 27, 25, 24, 22, 21, 20, 18, 17, 16, 15, 14, 12, 10, 9, 8, 7, 6, 4, 3, 2, 1, 0
6, 20	Chapel-place.	16
0, 12, 20, 22, 24	Coal-yard.	21, 15, 9, 2
22, 26, 27, 28, 34	Colonnade.	27, 11
7	Cross-lane.	10, 8, 7, 3
16, 17, 20, 24, 26, 29, 31	Crown-street.(a)	24, 20
0, 10, 17, 20, 25, 21, 24, 28, 30, 32, 36, 37, 41, 45, 53, 59, 60, 63, 65, 77, 81	Dudley-street.	85, 84, 65, 57, 50, 36, 28, 19
1	Dudley-court.	14, 10, 1
4, 11, 12, 14, 15, 16, 21, 28, 29, 31, 46, 47	Duke-st., Oxford-st.	27
	Duke-st., Lincoln's-inn.	44, 1
1, 15, 122, 126, 152, 154, 166, 170, 176, 177, 180, 183, 186	Drury-lane.	185
6, 21	Endell-street.	28, 17, 16, 15
1, 2, 11	George-street.	48, 38, 36, 35, 33, 29, 26, 24, 17, 15, 11, 7, 1
1, 9, 10	Gilbert street.	14
5, 27	Great Earl-street.	37, 17, 14, 13, 11, 10
6, 9, 20, 23, 37, 38	Great St. Andrew-st.	47, 42, 39, 29, 25, 11, 8, 7, 4
2, 6, 9, 13, 17, 20, 23, 29, 33, 34, 43, 48, 49, 50 58, 63	Great Wild-street.	58, 47, 40, 16, 11, 13, 10
	Guildford-street.	61
4, 6, 22, 33, 45, 48, 64, 67 121, 133, 138, 150	High-street.	21, 10
29, 186, 266	High Holborn.	13
1, 10, 18, 26, 27	Holborn.	255
0	Hyde-street.	33
1, 4	Jones'-court.	12, 5, 3, 1
3, 4, 23, 34, 38, 42	Kennedy-court.	5, 4, 3, 1
7, 38	Kenton-street.	44, 35, 12
	Keppel-mews.	40
6, 10, 12, 18, 21, 28, 34, 36, 37	King-st., Drury-lane.	38, 23, 12, 11
7, 12, 17, 18, 19, 20, 28, 29, 35, 46, 58, 63	King-st., Seven-dials.	36, 34, 29, 25, 23, 21, 18, 16, 15, 14, 10, 3
3, 6, 8, 14	Lascelles-place.	2
3	Little Denmark-street.	7
7, 11, 18, 21, 25, 28, 30, 31	Little Coram-street.	18
(Three Tuns) 4, 25, 35	Little Earl-street.	15
4, 11, 16, 17, 18, 23, 24, 27	Little Russell-street.	19
3, 4	Little White Lion-street.	2
4, 20, 22, 23, 40	Little Wild-street.	2
19, 20	Lumbar-court	20
2, 4, 40, 41, 59	Marchmont-street.	58
8	Maynard-street.	18, 16, 15, 8, 6, 5, 3, 1
3, 15	Montague-place.	24
5, 6, 10, 24, 28, 34, 40, 44, 45, 46	Museum-street.	58, 39, 5
2	Neal's-yard.	4, 2, 1
0	New-street.	5, 4, 2
1, 12, 21, 22, 25	Newton-street.	11, 13, 9
1, 8, 10, 13	Nottingham-court.	10, 4, 3
33, 51	Parker-street.	52, 51, 44, 38, 23, 9, 8
4, 13	Phœnix-street.	14, 4, 8, 2
9, 10, 16, 17, 24	Queen-street.	26, 24, 20, 8
4	Red Lion-yard.	2
4	Regent's-place.	7, 2
2, 6, 11, 12, 13, 14, 20, 35	Short's-gardens.	21, 15, 11, 0
6	Smart's-buildings.	6
1, 5, 8	Star-court.	9, 2, 1
7, 15, 18	Tower-street.	23, 21, 22, 4
1, 5, 7, 10, 12, 13, 37	Wild-court.	5, 4 3, 2, 1

Cholera and not Old Age.

Street.	Street.	Street.
Brown's-buildings	Lascelles-court	Shaw's-court
Compton-street	Lawrence-lane	Smith's-court
Crown-place	Lloyd's-court	Stewart's-rents
Henrietta-mews	Middle-row	John's-court
Hog-yard	Monmouth-court	Whitehall-place
Ivy-lane	New-court	White Lion-court
Johnson's court	Queen's-place	Wild-passage

(a) In Crown-street there are several duplicate and even triplicate Nos. of houses, so that the death cannot be fixed, and is therefore left out of the list of exceptions.

Old Age and not Cholera.

Street.	Street.	Street.
Abbey-place	Great Turnstile	Queen-court
Alfred-street	Great Russell-street	Russell-square
Alfred-place	Great White Lion-street	Russell-mews
Bedford-square	Hart-street	Russell-place
Bedford-place	Henrietta-street	Silver-street
Bernard-street	Hunter-street	Stone-cutter's-alley
Bloomsbury-square	Ivers-street	Store-street
Bloomsbury-street	Keppel-street	Southampton-row
Bloomsbury-court	Kingsgate-street	Southampton-court
Bloomsbury-market	King's Head-yard	Southampton-mews
Bloomsbury-place	King-street, Holborn	Stacey-street
Bury-street	Lincoln-court	South-crescent
Bury-place	Lincoln's-inn-fields	Tavistock-street
Bull and Gate-yard	Little Guildford-street	Tavistock-mews
Castle-street	Little Queen-street	Titchbourn-court
Chenies-street	Little Torrington-street	Torrington square
Chenies-mews	Little St. Andrew-street	Tottenham-court-road
Charlotte-mews	Market-street	Upper Bedford-place
Coram-place	Marchmont-place	Upper King-street
Clark's-buildings	Montague-street	Upper Gower-street
Denmark-street	New Turnstile	Upper Montague-street
Dolphin-place	New Compton-street	Upper Montague-mews
Everett-street	Pitt-place	Whetstone-park
Fogerty's-buildings	Plummers-court	Wilmot-street
Gate-street	Portsmouth-street	West-street
Gower-street	Plumtree-street	Woburn-court
Great Coram-street	Princes-street	Woburn-square
Great Queen-street		Woburn-place

17, Savile-row.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

DR. W. SENHOUSE KIRKES,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

INFLAMMATION AND ABSCESS OF THE TONGUE.

THE tongue is an organ so frequently the seat of disease, that a few words respecting its structure may be interesting. The muscles, usually described as entering into its formation, are insufficient to account for the extent and variety of its movements; whilst mention is rarely made of those deeper and more central parts in which the products of inflammation are occasionally effused.

The mucous membrane is one of the most highly organised of the whole body: numerous papillæ, which, though commonly divided into three sets, pass insensibly one into the other, spring from every part of its dorsum. Under the mucous membrane of both the upper and lower surface lies a layer of transverse muscular fibres connected with the integument. Vertical muscular fibres, separated by wide intervals, extend from the upper to the lower layer, forming near the tip of the tongue a sort of open structure, the interspaces being occupied by an aggregation of vesicles, which, according to Gerlach, bear a close resemblance to salivary glands. "In these interspaces lie elongated glandular masses, consisting of numerous vesicles, which, in size and structure, precisely correspond with those of the salivary glands. Each of these glandular bodies possesses its own excretory duct, which opens on the under surface of the tongue." (a)

These are the glands discovered by Blandin, and recently brought into notice by Nuhn, who seems to think, from his investigations upon animals, that they are peculiar to man. The ducts open by the free border of the plica fimbriata, a slightly elevated line on either side of the frænum, indicating the last trace of the separated embryonic attachment of the tongue with the floor of the mouth.

From the foramen cœcum to the epiglottis, the mucous membrane is smooth and devoid of papillæ; and the structure of the tongue is occupied by numerous mucous glands, which feel like hard knots under the integument; they do not exist at the tip of the organ. In cases of rapid swelling of the tongue, of which a report is given in this journal (p. 409,) the intermuscular glandular structures near the hip are the seat of the disease; and it must have been from the inflammation attacking only one set, and from the swelling being confined to one side of the organ, and encroaching especially upon its under part, that the unusual displacement occurred recorded by Wormald, who found that part of the under surface known as the plica fimbriata twisted towards the roof of the mouth.

Abscesses sometimes form in these glands of Blandin. A lady, in good health, married, and the mother of a healthy family, consulted Mr. Stanley for a hard but painless knot, the size of a small bean, imbedded in the substance of the tongue, near its tip. The mucous membrane covering it was raised, but loose and healthy. Upon its being grasped, there was an obscure sense of fluctuation communicated to the fingers, but, from a mere superficial examination, it would have been pronounced solid. Although cancer almost invariably commences on the edge of the tongue, its origin being often referred to the irritation produced by the rough edge of a carious tooth, yet, the patient's age being considered, and the frequency with which malignant affections attack this organ, it was thought right to investigate by operation the character of a tumour which was slowly increasing in size, and to extirpate entirely, if it proved to be of questionable character. Chloroform having been administered, an incision was made into it with a lancet, when there escaped about half a teaspoonful of well-formed, healthy pus. There was a slight discharge for a few days, after which the wound closed, and the patient has had no further return of the complaint.

A working man, aged 40, married, and in good health, was received into the hospital, Dec. 6, 1850, under Mr. Stanley, for disease of the tongue. The whole of the anterior part of the organ was thickened and swelled; the mucous membrane was tense and smooth, and the surface was elevated and irregular. Two knots, about the size of large peas, which communicated an indistinct feeling of fluctuation when grasped between the finger and thumb, occupied the substance of the tongue. The patient had been married for many years, and had never had syphilis, but he had long been accustomed to walk about, while engaged at his work, with a short clay pipe in his mouth pressing against the tongue. Mr. Stanley punctured both the knots, and there escaped from each a small quantity of healthy matter. The patient left the hospital with directions, that he should, for the future, avoid exposing the organ to that which was obviously a source of irritation to it.

It must have been some rare affection of these glands which has been described by the late Mr. Earle:—"Clusters of very minute semitransparent vesicles pervaded the whole thickness of the tongue, occupying nearly one half, and projecting considerably both above and below that organ. The slightest injury caused them to bleed profusely, and in some places the clusters were separated by deep clefts, which discharged a fetid, irritating sanies. This disease, which had resisted various plans of treatment, both local and constitutional, gradually yielded to perfect quiet, cleanliness, and large doses of hyoscyamus, which were increased to a drachm of the extract daily.(a)

The disease with which suppuration in the glandular structure of the tongue is most likely to be confounded is syphilitic thickening; both affections commence near the mesial line in the substance of the organ, and the thickness of the walls of the cyst in the former, renders it to the feel the same as a solid tumour. In syphilis it happens generally, but not always, that other symptoms are present at the same time, such as superficial ulceration of the tonsils and fauces, or some eruption of the skin; but when the induration occurs alone, and at a considerable time from the occurrence of the primary sore, it often happens that the diagnosis is attended with considerable difficulty. A gentleman consulted Mr. Lawrence with a thickened and elevated state of the middle of the dorsum of the tongue; the indurated knot was equal in size to a sixpence, and was covered by smooth and red mucous membrane. Upon being closely questioned, he stated, that eight months previously he had had an excoriation of the prepuce, which had appeared two months after connexion, and had lasted only four days. Further examination detected superficial ulceration of the mucous membrane of the velum and fauces, which, he acknowledged, had rendered deglutition difficult; but, as it had existed nearly six months, he had ceased to

(a) Handbuch der Gewebelehre. Von J. Gerlach, s. 468.

(a) Med. Chir. Trans., Vol. XII., p. 285.

think much about it, attributing it to disorder of the stomach. He had been to the seaside, and had adopted various measures for the improvement of his general health, but the state of the throat remained the same. Under a mild mercurial course he recovered completely. A young woman, aged 26, was under Mr. Lawrence's care in the hospital with a syphilitic affection of the tongue as the only symptom. She was married and in respectable circumstance; she had never, to her knowledge, had primary venereal disease, but three or four years ago she had had an eruption, described as scaly, and a sore throat, both of which lasted for some weeks. The disease in the tongue yielded to a mild course of mercury.

CHIMNEY-SWEEP'S CANCER.

A former number of this journal contains the narration of a case in which Mr. Lawrence removed from the front of the left ear of a chimney-sweep a small cancerous wart, the origin of which the patient rightly attributed to the irritation to which that part of the body was exposed by his carrying the soot-bag over the left shoulder. The operation was performed in the month of July, and up to the present time there has been no recurrence of disease; in fact, there is every reason to believe that the cure will be permanent, if the man avoid for the future exposing himself to a similar danger.

There is at the present time a patient in the hospital, with an open ulcerated sore on the left side of the face, originating, as in the preceding case, from a soot-wart, but allowed to advance beyond that period when a surgical operation can be attempted. The great importance of early extirpation was long ago pointed out by Pott and Sir J. Earle, and it is now so generally understood, that it is not common to meet with a case in which this affection is allowed to go on unchecked.

Henry T——, aged 67, a spare-made man, of swarthy complexion, with a skin covered with long black hair, and discoloured by innumerable greyish-black spots, not unlike freckles, states, that he has been at work in the soot-business ever since he was a boy, and that he has enjoyed good health. At one time, when it was the custom to mount chimneys for the purpose of sweeping them, he was much more exposed to the soot than at present, and, although a cap was drawn over the eyes and mouth, he has often felt nearly choked from the accumulation in his lungs and trachea of finely powdered soot, which he has with difficulty expectorated afterwards. He has always been attentive to cleanliness; washed regularly night and morning, so as to cleanse the whole body; the discoloration of his skin, however, has increased from year to year. It has been his custom to carry the soot-bag over the left shoulder, resting it upon the corresponding ear and side of the face.

Two years ago he noticed in the skin of the face, in front of the ramus of the jaw and below the ear, a small, hard, painless knot, the size of a bean. It remained stationary for four or five months, when, in consequence of the continued irritation of the soot, it slowly increased in size, fresh tubercles appeared, and ulceration commenced, attended with great pain upon the most prominent points.

Admitted into the hospital, under Mr. Lawrence, Nov. 29, 1850, a prominent tuberculated ulcerated surface, involving the integuments about the ramus of the jaw, the lobule of the ear, and the upper part of the neck, is immovably fixed to the subjacent parts. It secretes a copious thin offensive discharge, and, upon two occasions, has bled profusely. He is unable to separate the jaws so as to masticate solid food; sharp burning pain, especially severe at night, spreads from the open sore over the whole side of the face and scalp, under the integuments of which, red and prominent tubercles can be felt in every situation. The whole face and head is of dusky red hue, and marked here and there with dark blackish brown spots.

It being impossible to extirpate the diseased mass, only palliative treatment can be adopted. Soothing applications are directed for the sore; he takes half a grain of acetate of morphia at night, and milk and farinaceous food, as being the most easy of mastication.

It is a singular fact, that a disease so common in England should be scarcely known abroad.

In a work upon malignant tumours, by Carl Bruch (1847), every form of cancer is described save this; and Hyrtl,(a) in speaking of morbid affections of the scrotum, observes, the rugæ retain dirt, the acrid residue of the sweat, and the rancid secretion of the sebaceous glands, and become, from that cause, the not uncommon seat of superficial ulceration. Whether the ulcerative destruction of the scrotum in chimney-sweeper's cancer (a disease which is unknown to us) be referrible to the same cause is not yet determined.

The course of the disease is not destructive throughout; attempts at a healing process are observed from time to time, and parts of the open sore may cicatrise; the neighbouring absorbent glands become slowly affected; and distant organs rarely experience a similar degeneration, as in other forms of cancer; consequently, death in most instances ensues from the effects of direct extension of the ulceration from the spot where the soot-wart first appeared. In the present case it is gradually encroaching upon the mouth and fauces.—H. C.

(a) Topographische Anatomie, p. 28, (1847

KING'S COLLEGE HOSPITAL.

BY

HENRY SMITH, Esq., F.R.C.S.,

(Formerly House Surgeon to the Hospital.)

AND

By ROBERT C. R. JORDAN, Esq.,

House-Physician.

CASES OF CANCER OF THE STOMACH.

The two following cases of malignant disease of the stomach seem worthy of attention. The difference between the symptoms caused by the same disease in the two patients is especially remarkable.

Case 1.—Charles Brookes, aged 44, a native of Dartford, in Kent, by trade a gardener, married, and of temperate habits, was admitted into King's College Hospital, under the care of Dr. Todd, on the 29th of May, 1850. With the exception of occasional fits of dyspepsia, his health seems to have been uniformly good until about four months previous, when his present illness appears to have commenced.

The earliest symptom was pyrosis. The fluid was clear and tasteless. Soon he began to vomit his food shortly after eating. If meat was taken, the disturbance was greater. At this period of his illness he suffered but little; about nine months ago, however, or between four and five months from the commencement of the disease, great pain, referred to the epigastric region, occurred in paroxysms, three or four times during the day. He thinks these attacks were not more liable to come on after a meal than at any other time.

From this period, the pains became more frequent and intense, and the vomiting more distressing. Two months ago he first noticed a tumour situated in the epigastric region. Fourteen days before admission he had severe pain in the loins, and the urine became scanty. This was soon followed by œdema of the legs, which has rapidly increased since that time.

When admitted, he had an emaciated and haggard look, as if labouring under some severe organic disease. The legs were much swollen, the effusion extending upwards as far as the thighs.

A hard moveable tumour, five inches in diameter from side to side, and tender on pressure, could be easily felt occupying the site of the stomach, the epigastric, and a portion of the left hypochondriac and umbilical regions. The pulsations of the aorta could clearly be seen transmitted through this to the abdominal parietes. The patient could not lie on the back, as it produced nausea. On any change of position, the situation of the tumour in the abdomen changed also.

There was no apparent enlargement of the liver.

The heart-sounds were natural: pulse 90.

The urine was acid, without albumen, of sp. gr. 1·028; loaded with pink lithates.

The sounds of respiration were feeble; the chest large and barrel-shaped; very resonant on percussion. The intercostal spaces wider than usual.

Tongue furred; the skin dry; much thirst. The appetite good; the bowels regular.

The vomiting continued up to the time of admission, and during the first day in hospital his food was rejected shortly after taking it; he also spat up a large quantity of a glairy

fluid, which he stated was constantly rising into his mouth. This was neutral, and he said without taste.

There was not then, nor has there ever been, any difficulty in swallowing.

No hereditary predisposition to cancer can be traced from his history.

He was ordered,—

℞ Kreosoton, gtt. j.; morph. hydroch. gr. 1-6th; micarum panis, q. s. ut ft. pil, 6tis horis sumend.

With the following diet:—

One egg for breakfast; meat, ℥ij. for dinner. The same at tea, with milk o. j., and bread ℥vj., equally divided for the three meals.

By this, the vomiting was entirely checked. He spat up the fluid before described until the 4th of June, when that also stopped. The œdema of the legs, however, extended to the surface of the belly; and, on the 7th of June, there was great distension about the penis and scrotum. The pain before mentioned as occurring in paroxysm, was much lessened after admission. It extended from a little beneath the navel on the right side, to the epigastric region above. The bowels becoming rather confined, he was ordered on the 4th of June en aloetic pill to be taken occasionally. On the 6th and 7th of June he suffered from dyspnœa, and slept badly at night. He was, therefore, ordered, in addition to his other medicine, every night:—

℞ Extr. conii.; extr. lupuli. aa. gr. v.; in pil. ij.

Early in the morning of the 10th of June, epistaxis suddenly came on, which weakened him considerably. The pulse, which before had never been above 94 or 95, now rose to 108, and became at the same time more feeble.

On the 13th the œdema of the right leg became so great, that an incision was made, five ounces of serum drained away, and the patient experienced great relief. On the 17th of June numerous punctures were made in the penis and scrotum. The pulse had now risen to 120, and he was evidently getting rapidly weaker. On the 20th the pulse could scarcely be felt, and on the night of the 21st, while attempting to raise himself in bed, he suddenly fell back in a fainting fit; from this he recovered, but, on the morning of the 22nd, it returned, and he died in a state of syncope.

Post-mortem, Twenty-four Hours after Death.—There was great effusion of whey-like fluid into the cavity of the peritoneum. The stomach was considerably larger than natural, and unusually white in colour; hard and dense from great hypertrophy of its coats, which, near the pyloric end, were fully an inch in thickness—chiefly in the muscular layer.

The cavity of the stomach was almost entirely filled by a large gelatinous mass, consisting of numerous round, soft, fungus-like growths, mostly agglutinated together, like the head of a cauliflower; some few, however, tolerably distinct from the rest, were composed of round heads seated on narrower foot stalks, and in a measure moveable with the fingers. These growths varied in size from a walnut to a small pea. The mass was chiefly developed along the lesser curvature, and especially towards the pyloric end of the stomach; but, even the splenic extremity had not entirely escaped. The colour of this mass was dirty-yellow, streaked in some places with bright pink. The œsophageal orifice was free, the pyloric opening narrowed, but not directly involved in the growth.

The pancreas was much enlarged and hardened, and, as well as the glands in the vicinity of the stomach, apparently contained cancerous deposit.

Unfortunately, we could not trace how far the anasarca depended on the disease, as it was impossible to determine with certainty whether there had been any pressure on the ascending cava or not.

The liver was in a normal condition. The kidneys in a state of incipient fatty degeneration; the heart healthy; and the lungs very emphysematous.

Case 2.—John Melross, aged 37, married, and of temperate habits, was admitted into hospital under the care of Dr. Budd, on the 13th of July, 1850. He is a native of Scotland, but for the last seventeen years has resided in London.

In his occupation of house-painter, he has been accustomed to handle white-lead; but, although the blue line around the edges of the gums is distinctly marked, he has never had any symptoms referrible to the poison.

His health was good until about three years previous, when he began to suffer from dyspeptic symptoms, shown by occasional attacks of pyrosis, the fluid having an acid taste. At this period he sometimes, but very rarely, vomited his food. This was generally preceded by pain and a sense of fulness in the stomach; the vomiting always relieved him; he was, therefore, in the habit of inducing it artificially by tickling the fauces.

Eighteen months ago, all these symptoms became much aggravated; the attacks of water brash recurred more frequently, and vomiting came on almost every day. This usually happened about half an hour after meals; it was preceded by severe grinding pain at the epigastrium, but gave immediate relief to the other symptoms. He often brought up a very large quantity of food—never at any time blood.

The pain after eating varied with the nature of the aliment; thus it was very severe after meat, beer, or spirits; while he suffered little after milk or farinaceous food. There was no pain nor difficulty in swallowing.

The pain in the epigastric region was constant, and always greater when the stomach was full than when empty.

He has continued his work as a house-painter until the last six weeks, when he was obliged to give it up. Five weeks before admission he vomited a quantity of dark grumous matter, looking like coffee grounds. He states that before this there was a tumour perceptible in the epigastric region, which now he thinks is entirely gone.

Vomiting ceased two weeks ago. The pain in the epigastrium continues, but not so severely as formerly.

His condition at the date of admission was as follows:—Very emaciated, and with the appearance of one suffering from malignant disease. He has a sallow look, but no jaundice. There is no hereditary predisposition to cancer. He complains of constant pain in the region of the stomach, but does not appear to suffer much. Lies with his legs flexed, seldom speaking, and very listless; when questioned answers in a brisk manner.

The stomach bulges out the epigastric region, so that its outline can be distinctly traced. It is evidently much dilated. On the right side of the ensiform cartilage there is a hard tumour to be felt, moving slightly under the fingers. It seems globular, about the size of an orange. There is tenderness on pressure everywhere, but more marked over this spot than elsewhere.

The appetite is bad; he says that he has a bad taste in the mouth, and at times fetid eructations. The bowels are habitually confined. The tongue is dry and slightly furred. He complains much of thirst.

The pulse is 80. The heart and chest sounds are natural, and the pulsations of the aorta are very distinct over the tumour.

The urine contains a copious deposit of pink lithates; it is acid, and without albumen.

The patient is clearly suffering from malignant disease of the stomach, probably affecting its pyloric orifice; the treatment, therefore, can be but palliative. He was ordered the following draught three times a-day:—℞ Bismuth. trisnit. grs. v.; magnesiæ, ℈ss.; pulv. tragac. co. q. s.; aquæ, ℥iss.; morph. muriatis. gr. 1-24th; misce, ft. haust.; with a pill at bed-time every night, composed of two grains of extract of aloes, combined with an equal quantity of the extract of henbane. His diet to consist entirely of milk and flour, and in small quantities.

13th to 31st July.—Little change in the condition of the patient during this period, except that emaciation had increased, and he was evidently growing weaker; yet he never vomited, and his appetite slightly improved; the pain became less severe; and he slept better at night. The most distressing symptom seemed to be thirst. Once or twice the bowels became much confined, and it was necessary to relieve them by enemata. On the 22nd of July, for the same reason, the draught was obliged to be discontinued, and he was ordered to take his pills three times a day instead of only at night. The pulse was never very high, the general average about 78 or 80. The urine was always turbid with pinkish lithates. As there was no sickness, the patient was allowed an egg every day after the 25th, and after the 29th he was ordered, in addition, a pint of strong beef-tea. Neither of these changes in diet caused him the least uneasiness.

In spite of this he grew rapidly weaker, and, as he expressed a great wish to die at home, he was discharged on the 31st of July, and was afterwards attended by me at his own residence until his death, which took place on the 12th of August.

When at home it was utterly impossible to make him adhere strictly to any prescribed regimen; his friends gave him wine, brandy and water, and, in fact, almost everything for which he expressed any wish. Nothing, however, gave him pain, and he only vomited once after leaving the hospital; this was on the 8th of August; he then only brought up a small quantity of a clear, tasteless fluid.

There was little change in his condition except diminution of strength. The pulse now averaged from 90 to 100, and was, at the same time, far more feeble. The tongue became dry and brown; and the thirst was increased. On the 10th of August the extremities were cold, and slightly œdematous. This had increased on the 11th; and he died about noon on the following day.

The *post-mortem examination* took place, under the superintendence of Dr. Budd, twenty-four hours after death. The abdomen only was examined.

The body was very much emaciated.

There was no fluid in the cavity of the peritoneum. The intestines were in no place glued together; nor was there any adhesion of the liver or stomach to the abdominal parietes.

The stomach was rather larger than usual; its splenic end, as well as the œsophageal orifice, were perfectly healthy; the pyloric portion was firmly adherent to the under part of the left lobe of the liver, so that they formed one solid mass. This was very hard to the touch, and caused the tumour which had been noticed during the life of the patient.

Some of the mesenteric glands in the neighbourhood were much enlarged. Mr. Quekett kindly examined these microscopically, and pronounced them to be decidedly cancerous; the cells were in very large proportion to the fibrous matrix. A few of these enlarged glands were firmly joined to the greater curvature of the stomach by very firm bands of lymph. The outer surface of the stomach, and the upper part of the liver, were sprinkled with bead-like deposits, probably of cancerous matter.

On section, there was found, at the pyloric end of the stomach, just above and rather posterior to the opening into the duodenum, a large round excavation, as if the mucous membrane had been punched out. The edges of this ulcer were everted, and the walls very much thickened. The diameter of this portion (which exactly corresponded to the junction with the liver on the external surface) was rather more than three inches. Just above, and rather anterior to the pylorus, there was a fistulous passage running through the coats of the stomach, and under the mucous membrane, from the stomach into the duodenum. The track which it traversed was about three quarters of an inch, the edges of the passage were smooth and hard, and its calibre was about equal to that of a small quill.

The duodenum was otherwise healthy, and the orifice of the pylorus was not involved in the disease. The opening of the ductus communis choledochus was free. The substance of the liver and the kidneys was apparently quite healthy.—R. J.

The National Institute of Medicine, Surgery, and Midwifery.—An adjourned general meeting of the members of this Association was held at the Hanover-square Rooms on the 11th inst., for the purpose of reconsidering the provisions of the Medical Reform Bill, as amended by the Council. Mr. Clifton was in the chair, and there were present about twenty other members. Mr. Fuller, the solicitor, read the clauses in the Bill, which had been modified, and particularly referred to the 10th clause, which, having met with opposition in its original form, had been amended, so that, instead of provisions restricting the *ad eundem* diploma of the proposed new College to members of the British Universities and the London College of Physicians, the privilege was extended to all persons having a medical or surgical qualification from any legally established institution in the United Kingdom. An important amendment was also made in the 18th clause, shortening the period of qualification for members of the Council, and for the presidency, from fifteen to ten years. Other minor alterations were also proposed and carried, and the Bill as amended was accepted by the meeting. It was announced that the Institute intended to submit the amended Bill to the consideration of the Profession as early as possible prior to its being re-introduced to Parliament.

Census of 1851.—Keepers of madhouses are not obliged to return the *names* of the inmates of their houses; the *initials* will be sufficient.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, December 21.—Medical Society of London. *Subject*:—Dr. E. Lee, on Functional Paralysis. Eight o'Clock.

Saturday, December 28.—Medical Society of London. *Subject*:—Dr. Glover, on Picrotoxine, Illustrated by Experiments. Eight o'Clock.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 21.

MEDICAL ETHICS.

In maintaining that an elevated tone of morals, and extensive scientific and literary attainments are indispensable for members of the medical profession, we should be careful to place our argument on its true basis. If we contend that, without such qualifications, a man must necessarily be devoid of all skill in the detection, and all success in the treatment of disease, daily observation will confute us; for it is not uncommon to meet with men whose acquaintance with scientific principles is extremely limited, whose minds are little imbued with letters, and whose moral aim reaches not much higher than the establishment of a fair reputation with a view to their own personal interests, evincing considerable tact and sagacity at the bed-side of the patient, and approving themselves fully competent to deal with disease in its ordinary forms; while, on the other hand, it is not to be denied that we occasionally meet with men distinguished for learning and scientific knowledge, who exhibit no great practical efficiency, and make but a poor figure in the actual exercise of their art. Though medical education and medical ethics be comparatively trite subjects, we yet think that we shall not be wasting our own time, or that of our readers, if we devote an occasional article to those qualifications and accomplishments, intellectual and moral, which are essential to the worthy exercise of medicine as an art, to the proper social position of the medical profession, and to the maintenance of desirable relations among its members.

First, then, we affirm that a high personal character, an elevated tone of feeling, and careful moral culture, are absolutely requisite to form a worthy practitioner of medicine. There is no profession which is so much calculated to try our moral qualities, by bringing us into complex and difficult moral relations with others. The patience and temper of the medical practitioner are continually tried by the fretfulness of illness, by the monotony of iterated complaint, by

the garrulity of age, by the childishness of imbecility, by the impertinences of the vulgar, the curiosity of the idle, the prejudices of the ignorant. His equanimity is invaded by the anxieties, the misgivings, the despondency, the agitation, of those who suffer, and of those who are interested in them. His presence of mind and self-dependence are severely tested by sudden dangers, and startling emergencies, and fearful perturbations: by the casualty which crushes manhood in its prime of vigour and usefulness; the attempted suicide; the mental tempest, and moral wreck of madness. His fortitude and his confidence in his own art, are sternly taxed by the frequent frustration of his best and wisest efforts. His cheerfulness and tranquillity of mind are overcast by the clouds of sorrow, by the dull night of hopelessness, and the shadow of the tomb settling on all around him. Amid all these troubles and contingencies he must stand unshaken, yet sympathising; serene and gentle, yet active, authoritative, and energetic; anxious, and often perplexed himself, yet guiding others in their perplexity, and cheering them in their despondency—himself too heavily laden, yet aiding others to sustain their burden.

The medical practitioner also must be in the highest degree discreet and trustworthy; he is the depository of more secrets even than the priest, and the peace of many families, and thence the welfare of whole communities, may be entrusted to his keeping.

Is a man of a narrow heart, of a grovelling mind, fit for such ministrations, or worthy of such trust? Surely not. We have here need of one whose being is lofty and spiritualised —purified from the dross of the world—conscious of his high mission, and of his own capacity to fulfil it.

If there be any truth in these views, it follows that a most essential part of medical education consists in preliminary moral culture; and that, in fact, the very first inquiry to be made in reference to the candidate for medical honours or medical licences, is, not whether he have studied classics or philosophy—not whether he understand anatomy or chemistry—not whether he have heard lectures or walked hospitals—but whether he can produce unquestionable testimonials of high personal character, and proofs of fine moral culture — whether, in a word, there be good reason to believe that he is individually fit for so serious and so responsible a calling as that of medicine.

We further assert that extensive scientific attainments, classical learning, and general literature, are absolutely necessary to form an accomplished member of the medical profession—to maintain that profession in its proper social position—and thence to confer upon it its full influence and its full extent of usefulness. We have already admitted that neither much learning nor extensive knowledge of scientific principles, is indispensably requisite for the successful treatment of common cases of disease: without either, a man may be a decent *routinier*. But there is a wide difference between being able to practise an art in its common-place details, and being capable of enlarging the limits of the science on which that art depends; and we cannot regard any one as an accomplished practitioner of medicine unless he be in a position to avail himself of such opportunities of scientific discovery and improvement as may arise in the course of his practice. Now, what is scientific medicine? Simply the application of natural science, in its widest range, to the preservation of health, and the cure or alleviation of disease. Hence the medical practitioner who is not versed in the general principles of science can never be more than a mere workman. The only chance he can have of adding to the stock of knowledge lies in recording the powers of some new remedy, or the advantages of some particular plan of treatment; and even here his observations will probably turn out to be erroneous, from the want of correct habits of observing, and of the power of accurate deduction. Add to all these considerations, that medicine being one of the most difficult subjects to which the human mind can be applied, great benefit must in most instances be derived, even in mere practice, from the acuteness and versatility of mind and faculty produced by philosophical discipline, and scientific habits of inquiry and operation.

With respect to classical learning, the bearing of our argument is somewhat different. Independently of the great general advantages to be derived from a sound knowledge of the Greek and Latin tongues,—advantages too universally admitted to stand in need of illustration here,—there is no doubt but that much actual and available information in the theory and practice of medicine is to be found in the writings of the Greek and Roman physicians: those who hold an opposite opinion can never have read them, or must have read them to very little purpose. It may be added, that had they been more generally studied in modern times, some superfluous labour might have been saved in rediscovering what had been discovered ages before. An acquaintance with the classical writers on medicine is therefore of direct utility to the medical inquirer and practitioner of the present day. With reference to Latin, it should also be remembered that, till within the last century, a very large proportion of the most distinguished works on all subjects connected with medicine, were written in that language: to say, therefore, that Latin is of no use to the medical practitioner, is equivalent to saying that comparatively few works on medicine worth reading have been written till near our own times; which, again, amounts to maintaining that the writings of the greater number of the most illustrious men who have adorned our science, are not worth the trouble of perusal!

With respect to general literature, in as far as it involves an acquaintance with the modern languages of Europe, we need not point out its importance to all practitioners who wish to be well informed as to the present state of their own art, and to have access to the inestimable stores of knowledge opened in the writings of our French, German, and Italian contemporaries. Further than this, we are, of course, not disposed to contend that purely literary researches can have any influence on the study or practice of medicine, except that of expanding the mind and rendering it more apt for any and every liberal pursuit. But here we come upon a part of our argument by no means the least important of the whole, and applying alike to scientific attainments, to classical learning, and to general literature.

We contend, then, that all these, irrespectively of any aid, direct or indirect, which they may afford to the medical practitioner, in the study or exercise of his particular art, tend to give him personal weight and estimation with all men of learning, science, and general accomplishment, and thence to increase the respect in which the profession is held by the public at large, and, consequently, to augment its utility by extending its influence. Medicine, though in reality closely linked with every branch of natural science, and more or less connected with every department of human knowledge, is, to public apprehension, the most isolated of all arts. In reference to all other professions, the public can, to a great extent, judge by results. If a barrister were

generally to lose his causes, he would, despite all the erudition in the world, be pronounced an unsound lawyer; if an engineer were to construct bridges which straightway fell into the river, or railways whereof the embankments constantly subsided and lodged the trains in the adjacent meadows, he would, notwithstanding the possession of all the learning of the Egyptians, be considered a most inefficient and dangerous engineer. But it is quite otherwise with medical results. Men in general, however intelligent and well informed, have neither the capacity nor the opportunity for testing them; so that a practitioner may enjoy everlasting gratitude for preserving a life which never was in danger, or was endangered only by the bad practice pursued; and may reap amazing honour and glory for conducting a patient through a disease which would have been surmounted in half the time without his assistance. Hence we sometimes find the most enlightened and accomplished men of the day the dupes of ignorant and despicable quacks, and thoroughly deluded by impostures which any well-informed practitioner of medicine would see through in a moment. In a general way, however, the public, conscious of their inability to judge by the results of medical practice, which they have no means of appreciating, are prone to estimate the qualifications of medical practitioners by something which they can appreciate. In this, as in other matters, men reason from what they know to what they do not know. Accordingly, if a physician sit down in the society of scholars, and they find him a scholar, they will be disposed to give him credit for being a skilful practitioner; but if he, professedly a member of a *learned* profession, is found to be a dunce—profoundly ignorant of those topics on which they are best qualified to judge—you will not easily persuade them that he has any professional merit, although he may, in reality, be a good man at the bed-side. Again, if a physician be in company with men of science, and they find him conversant with the principles of science in general, they will give him credit for proficiency in his own particular branch; but if they find him innocent of all other science, they will not form any high estimate of his proficiency in medicine. Once more: if a physician associate with men of general information and intelligence, and they find him generally well-informed and acute, they will infer that he is particularly so with reference to that branch of knowledge which he especially professes; but if they find him generally ignorant and stupid, they will conceive but a poor opinion of his professional knowledge and sagacity.

POOR-LAW PRACTICE.

The time has come for the Union surgeons to prepare for another campaign. While the evils continue their energies must not flag. Great efforts, indeed, require rest for the renewal of the strength that begat them; but that is the law of vitality. The Committee of Union Surgeons have had a long sleep, and we hope, that during that repose their dreams have purged off those melancholy misgivings which formerly haunted their worthiest efforts, and made their last Report resemble a mausoleum of blighted enterprises. We trust that they will soon awaken to their duties, and commence with redoubled energies the noble contest in which they have hitherto laboured with so much assiduity. It is true that they have not yet had the help of small successes, but brave men never despair whilst they have right on their side, and a good cause for the winning.

The approach of the Parliamentary session imposes new duties on this Committee. It is not probable that any specific measure for the amelioration of the grievances Union surgeons complain of will be introduced by Ministers, but in order to prevent further encroachments, the Committee must maintain an unsleeping vigilance over the proceedings of Parliament, and review all the bills and resolutions of the House, to ascertain the possibility of grafting upon them clauses favourable to the interests of the medical officers. New bills for the improvement of our sanitary regulations will doubtless be introduced; and, unless the Union surgeons are exceedingly watchful, they will be coerced into the performance of laborious and unpaid duties; for there appears to be no limit to the exactions the Government is willing to make upon their invaluable services.

Three thousand parochial functionaries, scattered over the country, well informed on scientific subjects, and possessed of unlimited opportunities of ascertaining the sanitary evils which molest all classes of the community, and specially adapted, also, for carrying into effect the measures necessary for the removal of those evils, constitute a temptation for an arbitrary disposal of their time and talents which few Governments would have virtue enough to resist.

The Government, too, is determined, if it can, to appropriate their services, and to leave the amount of recompence to the equity, generosity, and good faith of Boards of Guardians. It desires to familiarize the medical mind with acts of aggression, until, encroachment becoming a law of office, the Union surgeons will cease to recognise it, and perhaps, wearied with altercation, will quietly submit to whatever injustice the Government may choose to inflict. This must never be, and shall not be whilst the duty devolves on us to guard the interests of the Profession.

While educated men are paid only 6d. a case, and in some instances only 3d., as a beggarly remuneration for able, constant, and indispensable medical service;—whilst sordid and mercenary Boards of Guardians attempt to diminish even that paltry dole, and Poor-law Commissioners abet their acts;—whilst an unwholesome and degrading competition sows jealousy abroad in the Profession, and yokes the ox to the plough under the influence of unmanly, but very natural fears for his own preservation and security—causes of indignation and complaint cannot be wanting; and the elements of a protracted and bitter agitation for the redress of grievances, which offend alike the principles of justice and the natural instincts of integrity and honour, will continue to disturb the Profession. The case of the Union surgeons is undoubtedly bad, but it might be made worse by disunion, and by losing heart at the very time when manly exertion is most required.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

In another column will be found the concluding letter of our correspondent "Spectator," who, dropping his mask, speaks *in propriâ personâ*. That letter, as well as those which have preceded it, merits an attentive perusal. The subjects on which Mr. Macilwain has touched are of great importance to the welfare of science, and his examination of them, though necessarily limited, both interesting and useful. If any think that he has expressed himself in terms bordering too much on asperity, let them remember how difficult it is to be at once both truthful and courteous. In his earnest pleadings for more attention to inductive philosophy, we cordially concur, and we think that the time has arrived for the difficulties in its application to the science of pathology, to be met and considered.

There are, indeed, difficulties both general and peculiar;

but they chiefly affect individuals. Colleges, hospitals, or the Royal Medical and Chirurgical Society, could gradually, yet effectually have surmounted these. Even were it otherwise, the startling fact remains, that until such difficulties have been overcome, no branch of knowledge has been moulded into the form of a science. A most apposite example is afforded by geology. It is not more than forty years since what was dignified by the name of the Science of Geology was little more than a series of conjectural hypotheses.

Geologists ceased to generalise on particulars palpably insufficient. They collected facts, and, in reasoning on those facts, followed the rules of induction. At the present time few sciences are in a more satisfactory condition; few have had to contend with greater difficulties, or have brought the contest to a more triumphant issue. Surely this is encouraging.

We trust the position, experience, and unquestionable sincerity of Mr. Macilwain will secure for his ably-written letters the earnest consideration of the Council of the Royal Medical and Chirurgical Society.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

On the Origin of Inflammation of the Veins, and on the Causes, Consequences, and Treatment of Purulent Deposits. By Henry Lee, F.R.C.S., Assistant-surgeon to King's College Hospital. London. 1850. Pp. 91.

The observation of purulent deposits and secondary inflammations after operations and injuries, in organs remote from the part immediately interfered with, belongs to a very ancient period in pathology; and the doctrine of purulent infection of the blood in these cases may be traced back as far as Boerhaave and Morgagni, if indeed the germ of it be not to be found in still more ancient periods. The first clear demonstrative basis for this doctrine, however, is undoubtedly owing to the indefatigable industry and scientific enthusiasm of John Hunter, who, in the end of last century, published his celebrated memoir on Inflammation of the Veins, in which he showed beyond doubt the passage of pus into the current of the blood, and its connexion with various severe constitutional and local symptoms. The cases in which Hunter studied the fact of the admission of pus into the circulation were chiefly those of venesection and other circumstances involving serious injury of considerable veins, and the bias of his inquiries led him to consider the pus as in these cases always secreted from the inner membrane of the vein, disregarding on the other hand many of the phenomena which, both before and since his time, have been ascribed to infection of the blood by pus derived from foci of inflammation external to the vessels. While, therefore, Hunter's researches on the inflammation of the veins became known throughout Europe early in the present century, the revival of the old doctrine of purulent infection by absorption of pus was reserved for MM. Gaspard and Cruveilhier, whose experiments showed clearly the formation of abscesses in the lungs, in consequence of the admission of mercury and other substances into the venous circulation, and likewise the absorption of liquid metallic mercury from the interior of bones. M. Cruveilhier's doctrine was, that pus only produced the symptoms of purulent infection when discharged *in substance and unchanged* (*en matière*) into the circulation, and that this effect might take place either by absorption through the open mouths of wounded vessels, or by the inflammation of the veins themselves. About the same time, M. Velpeau called attention, mostly upon hypothetical grounds, to the old but vague doctrine of purulent infection, as applied to a great number of cases in practical surgery, and as explanatory of the phenomena of secondary abscesses after operations; and shortly afterwards, the observations of Arnott and others in this country, and of M. Dance in France, showed the connexion of these and other inflammatory phenomena with wounds and injuries of veins, and the accumulation in them of pus and other products of inflammation. Facts illustrative of the same connexion had been placed on record from an early period after Hunter's Essay, by Wilson, Clarke, Ribes, and others, and were again introduced into notice in this country by Mr. Arnott and Dr. Robert Lee; and thus the name of *phlebitis* became in European pathology nearly synonymous with a grave constitutional affection after operations, and in some other cases.

It was a remarkable fact in the history of this discovery, that the observations of John Hunter, which form by far the most important advance made by a single individual in the course of it, remained entirely unappreciated and unapplied (in connexion with secondary abscesses) by the pathologists and morbid anatomists of France, for fully a quarter of a century; even while Velpeau and others were working towards the solution of the difficult problem of purulent infection by a different path. Indeed, the chief wonder is, that Hunter did not himself see clearly the application of his own results to the phenomena described long before by Morgagni as those of purulent infection; a fact which can only be ascribed to the general ignorance of medical literature, which precipitated Hunter into many errors, and prevented some of his most important contributions to medical science from taking firm root until worked out in connexion with those of others, by his admirers and followers in this country. No one has described with more accuracy than Hunter the whole of the local phenomena of phlebitis, and even the majority of the constitutional symptoms; in regard also to the anatomical relations of the pus within the veins, and the formation of limiting barriers of decolorised clots around it, his memoir is all but complete; but the connexion of these facts with the secondary abscesses, described by his predecessors, he has left to be worked out by others, who, in turn, have too often ignored his researches, and thus produced in the literature of this subject a complicated mass of confusion and pointless research, the perusal of which, if painful and difficult, ought to be at least a most instructive lesson to the young author, showing most clearly the necessity, even for his own sake, of a careful study of "the previous question."

Within the last few years we have had two very important contributions to the experimental investigation of the doctrine of purulent infection; first, the memoir of MM. Castelnau and Ducrest, which, for the first time, demonstrated the identity of the results derived from the artificial introduction of pus into the blood with those observed in cases of accident and disease; and secondly, the book of M. Sedillot, which brings to bear a large mass of experimental inquiry on the same subject, not perhaps with so clear or certain a result as might have been looked for; but at least with the effect of illustrating very fully some of the conditions under which pus acts in producing the symptoms and anatomical results of purulent infection. M. Sedillot (we may state, for the information of such of our readers as have not seen his work,) comes to the conclusion, that it is the *globules* of pus alone in which the poisonous property resides; and that pus may pass into the circulation either from genuine phlebitis, or by absorption from the open mouths of vessels, in the same way as the mercury in M. Cruveilhier's experiments. With MM. Castelnau and Ducrest, however, he seems to consider the effects of pus as peculiar and specific, differing from that of all mineral as well as of putrid animal substances.

Without entering into any criticism of these results, or any further detail of the history of this subject, we have thought it right to make these few observations, in announcing to our readers a new series of researches on a subject so much controverted by former pathological writers; the more so, as we believe the work of Mr. Lee to have opened up, in a most successful manner, a hitherto neglected branch of the inquiry, and one which cannot fail to afford most important results bearing on the general doctrine of the subject.

The result of Mr. Lee's experiments on the effects produced by mixing pus with blood withdrawn from the body will be found in the following sentences:—

"When pus is mixed with blood fresh drawn from a healthy animal, it is found in a marked manner to favour coagulation. This effect does not take place immediately, as in the case of the mixture of an acid with the blood; and I have reason to believe that where the blood has lost its natural power of coagulation, no visible change is produced in it by the addition of pus. It appears, therefore, that this effect depends rather upon a vital than a chemical influence. In some cases, the coagulation takes place in less than two minutes; in others, after a longer period; but in all the experiments made, the influence of pus, when added to blood, in promoting its coagulation, was sufficiently evident. Putrid pus was

found to act more rapidly than healthy pus; but the admixture of water was found to retard the operation; the result, in this respect, differing in some degree from the conclusion drawn from a similar experiment performed by Hunter. . . . When the pus is introduced [into a vein] in any large quantity, the coagulation of the blood is at once determined, and the entrance of pus into the circulation, thereby prevented." . . . In some cases, "so sudden was the effect, that the mixture of blood and pus coagulated before it could traverse the jugular vein, as indicated by the induration and cordlike feeling of the vessel."—Pp. 4, 5.

A little further on he says:—

"If the coagulum be allowed to remain, the vein in which it was formed soon becomes thickened; but, as the experiments cited prove, *this thickening is the effect, and not the cause, of the stagnation of the blood in the vessel.*"—Pp. 6, 7.

The perusal of Mr. Lee's experiments leaves us in little doubt of the correctness of his views on this subject; and it need scarcely be pointed out how much these facts tend to modify our views on the subject of phlebitis. We cannot indeed as yet satisfy ourselves as to the form which the question will ultimately assume, nor do we feel called upon thus to anticipate the future progress of science by our criticism; but it is quite clear that Mr. Lee has made one of the most important contributions to the experimental part of the pathology of this subject that has been published of late years; and the readers of his work will find several important hints in addition to those we have quoted, and for the discussion of which we have not room at present.

We wish we could say that Mr. Lee has as effectually grappled with the general relations of the subject as with this individual portion of it, which he has made his own. But, notwithstanding our complete conviction of the correctness and value of his experiments, he fails at many points to carry us along with him in his descriptions of diseased appearances, as well as in his deductions from the labours of others. Thus, in p. 51, he tells that "the first appearance produced in the structure of the lungs is that of one or more congested or dilated veins of very small diameter;" in p. 40 he speaks about a yellowish white coagulum in the left auricle "adhering to an *inflamed spot on its inner surface;*" in p. 17, "the coats of the vessel will then *take on increased action.*" We think there are few modern pathologists who would not have desired, in points affecting so much the conclusions that Mr. Lee arrives at, to have had more detailed and pointed descriptions of the phenomena implied in these sentences.

In recommending a reconsideration of the subject to Mr. Lee, and particularly a renewed investigation of the morbid anatomy of the vascular tissues, and a renewed and careful reading of both modern and ancient authors on purulent infection and phlebitis, we speak as to one who has proved himself an able experimenter, and a truth-seeking man, and who is in no danger of having his former labours depreciated, because he has not done everything possible under the circumstances. But we confess that his opinions and judgments would have had with us more weight, had we seen evidence that he was more familiar with the history of the subject as we have slightly sketched it, and with other important collateral branches of inquiry which we have been unable to enter upon; but to which allusions will be found in the works of one or other of the authors we have named. We have no doubt he would have been able, in going over this beaten track, to clear away obscurities and confusions in a way that can only be done by one who has looked with his own eyes, and of which his mode of dealing with the experiments of Cruveilhier and Gaspard forms an excellent example. We would therefore commend the subject into his hands again, not to undo, but to add to what he has done; and in the mean time thank him very heartily for having contributed to our literature what we find to be more rare than is good for either reviewers or readers, a truly original monograph.

The Symptomatic Treatment of Asiatic Cholera. By Ewing Whittle, M.D. Lond. London. 1850. Pp. 100.

This is one of the many *brochures* which we owe to the cholera; and, unpretending as it is, we only regret that we are not more frequently favoured with productions of the kind; a satisfactory reason is, however, given by our author, and we can well appreciate the truth thereof. The treatise is of a decidedly practical nature, though our author does not hesitate to discuss the pathology at some length, and agitates the question of its position in the great nosological chart with some skill and discrimination. He considers the malady under the four stages of invasion, of spasm, of collapse, and the stage of encephalic fever. The symptoms he describes under the following heads:—1. Those having reference to the *expression*. 2. The symptoms connected with sensation. 3. With the function of circulation. 4. With the function of respiration. 5. With the function of articulation. 6. With the secretions. 7. With temperature. 8. With the state of the brain.

He gives a good summary of the general modes of cure proposed, and professes himself to be a decided advocate for the use of the lancet. He supports his views with considerable ability, and, if we could put full faith in tabular views, presents a very interesting statement of the comparative success of different modes of cure.

There are a number of interesting cases interspersed throughout the book; and, though we cannot feel disposed to agree with him as to the *post hoc*, and *ergo propter hoc*, in the success of the lancet in cholera, we must admit that he has made out a tolerably fair case in defence of his theoretical propositions.

We would strongly recommend those who are most confident of the beneficial agency of opium in cholera, to peruse carefully his remarks at page 89.

Like all enthusiasts, he has full confidence in his plan of treatment; speaking of the first stage, he says, "but, above all, now is the time for bleeding. Patients bled at this period will *always* recover, except they be those very worst cases which get blue rapidly." By this latter remark he sufficiently exonerates himself from all charge of rash empiricism and random quackery. Monographs such as the present, if more general, would greatly tend to enlarge the sphere of our practical experience, independent of any light they might be the means of throwing incidentally on the pathology of a most obscure affection. We have much pleasure in recommending the book to the perusal of our medical brethren.

Remarks on Insanity; its Nature and Treatment. By Henry Monro, M.B., Oxon. Part I. Pp. 75. London. 1850.

The object of Dr. Monro's present treatise is to prove, that insanity is a disease arising from deficient nervous tone consequent upon depressed vitality; and, in support of his hypothesis, he adduces many interesting facts, derived from mental phenomena and the physical condition of the insane. There can be no doubt that the treatment of insanity, to be successful, must be based on sound pathological views, and the advantage which Dr. Monro enjoys, as physician to an extensive lunatic asylum, has enabled him for some years past to test the truth of his theory by the touchstone of experience. We have no hesitation in recommending his *brochure* to the attention of the Profession. Many of the author's views are original and very ably argued.

An Inquiry how far Consumption is Curable; with Observations on the Treatment, and on the Use of Cod-liver Oil and other Remedies: with Cases. By James Turnbull, M.D., Physician to the Liverpool Infirmary, &c. Second Edition. Pp. 106. 1850.

There cannot be a doubt on the minds of those engaged in clinical and pathological-anatomical researches, that tubercular matter may become obsolete, as well as that it may undergo the process of cretefaction. Moreover, most pathologists will admit, that it is highly probable that tubercle may be absorbed; but some have gone yet further, and have held, that the healing of tubercular cavities is by no means of unfrequent occurrence: Dr. Turnbull ranks among the latter. Indisputable evidence, however, that a single cavity, of the description referred to, has ever healed, is supposed by many to be yet wanting. (a) Dr. Turnbull adduces no fact to shake the doubts of the sceptical. Several striking cases of the recovery of persons labouring under all the *symptoms* of phthisis are, however, given by Dr. Turnbull, who adds his testimony to that of preceding authors to the efficacy of cod-liver oil,—a remedy that is even yet less extensively employed than its powers sanction.

(a) See Dr. Walshe's article, "Adventitious Products," in the "Cyclopædia of Anatomy and Physiology."

A Few Suggestions on Consumption. By Robert Hull, M.D., Extra-Licentiate of the Royal College of Physicians; Physician to the Norfolk and Norwich Hospital. Pp. 138. London.

Dr. Hull's little book has for its object—1st. To persuade the Profession to trust to horse-exercise as the remedy for phthisis pulmonalis; the Sydenham-cure, it might be called. The patients are to ride morning, noon, and night,—to ride when the disease is yet incipient,—to ride when cavities are present, and not to abstain from riding, even though there be, in addition to cavities, "looseness and night-sweats." 2nd. To dissuade the Profession from using opiates in consumption. Dr. Hull says:—"*Ex opiatis*, tanquàm à peste, fugiendum est." And again: "Numberless lives are annually sacrificed through the use of opiate cough medicines."

Although Dr. Hull's book contains little that is new, and not much that is instructive, being chiefly compounded of apparently hypothetical cases, and epigrammatical sentences, yet it has the advantage of being very amusing, and few whose leisure permits will, after reading the first page, lay it down till they have finished the last.

GENERAL CORRESPONDENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

CONCLUDING LETTER.

[To the Editor of the Medical Times.]

"Est quadam prodire tenus, si non datur ultra."

Sir,—Experience has often exemplified "obsequium amicos veritas odium parit;" and the influence it has on human affairs; but experience has also sometimes shown the "amicos" to be of little real value, and hope has often rendered the odium tolerable, in suggesting, that for wisest purposes it may have been permitted to overlay something more enduring. However these things may be, speaking plainly seems necessary to the progress of science, and those who suffer for it have at least the comfort of sharing neighbour's fare, and of being in good company; yet, while it is necessary to be uncompromising where truth is our object, it is very desirable to avoid *pressing a case* with the zeal of an advocate against any public body, and especially of our professional brethren; to attempt more than is necessary to evoke the proper application of the high powers with which they may be individually gifted, or with which they may have been collectively entrusted, neither serves the ends of truth nor justice, with which I have the strongest conviction that the interests of science are identical. The allegations already remarked on are such as I may have more or less joined others in making; but there is one which I would venture on submitting myself, which, in relation to the interests of science, outweighs them all. I allude to the neglect shown by the Council, of all cultivation of inductive philosophy in medical and surgical investigations, and the coldness or discouragement they deal out to those who would advocate an adherence to the rules of induction. For aught that the Council do, Lord Bacon might as well have never existed, instead of having been the man to teach us the mode by which we could render that "Light" easy and available by the most ordinary capacity, by means of which we have discovered all that in science is worthy of that name. We cannot suppose that the Council can be uninformed as to the obligations that all sciences are under to inductive philosophy, nor to the conjectural condition of them previously to the application of the rules which it prescribes; nor can the Council fail to perceive, that, at the present moment, the so-called medical science represents just that "conjectural condition." Further, consistently with such condition, they may observe that the mode in which it is cultivated is characterised by an habitual or pervading neglect of the rules of inductive philosophy. The Council *ought to be* cognisant of how much Hunter and Abernethy owed even to a somewhat measured observance of the precepts of induction, and how much they overlooked or let slip whenever they neglected or abandoned them. I intended to have pointed out these and other matters at the College, had not every opportunity which either orations or lectures afford been withheld from me. I trust, however, that the "Life of Abernethy" may yet give me a chance of pleading for a tardy justice to his neglected claims, and of submitting to the Profession the position in which these great men stand in relation to the science which they alike adorned and illustrated. Not to digress, however, there never was a time, perhaps, when the aid of inductive science was more plainly necessary, or more obviously suggested, by one of those all-wise arrangements by which the greatest evils are sometimes made to evolve that which is good. No reflecting man, when he looks around him on the present state of medical science, whilst he deplores the exclusive anatomical physiology of one, the morbid anatomy pathology of a second, the microscopism of a third, the single-organed pursuits of a fourth, the monoscopic one-diseased strugglings of a fifth, and so on; no man, I say, when he sees all this, can fail to recognise in these things, thus disjoined and worthless, those elements which, if connected and endowed with a well-purposed polarity, would constitute many of the requisitions of a really inductive inquiry; nay, more, those inquiries, of all the most necessary to a practical physiology, which relate to the influence to which *living bodies* have been exposed, and of which I have myself long urged the necessity, are beginning to be urged on the Profession by the facts from time to time ably put forth by Dr. Webster and others, and by the sanitary movement. Induction, however, is not everything; at least there are things not necessarily understood or comprised in that term. The Council should not send forth facts, or, at all events, "reasoning," for which they are "not responsible." To be sure it is highly characteristic of such an act to plead that the Royal Society does the same. To excuse a folly, on the plea that another is guilty of it, is just such an observance of the rules of logic as might have been expected from those who refuse to include an adherence to them amongst the conditions on which papers are admited for publication.

I must, however, hasten on to other points. If the Council have, with human frailty, sometimes obeyed the suggestions of a pitiable cliqueism instead of the generous impulses of an ennobling duty,—if they have committed a corporate wrong,—if they should at this moment be contemplating some new instance of injustice, and be *nominating* a president over the heads of several others who have greater claims,—a candidate who, after years of absence, comes back to engross the scanty provision alone available by those who have borne through years the heat and toil of London competition,—if all this be, are there not those who look calmly on? Is there nothing to be said of that apathy, that indifference to the claims of others, which neglects even to examine? Again, if the system does allow the hospitals, or college, or both, to taboo men for persecution to whom they dare impute no crime but hard fagging in their profession, and straightforward opposition to jobbing; is nothing of all this due to a profession which looks unmoved on such proceedings? We know the light in which the criminal law views the familiar parallelism; and, although in scientific almost more than in any other matters, we are often bitterly reminded, that

> "In the corrupted currents of this world,
> Offence's gilded hand may shove by Justice;"

yet the parallelism, resting on principles alike eternal and immutable, remains unchanged. Poor indeed must be the moral feeding of those who are satisfied with the shadowy difference of that which deprives a man of life, from that which, withholding from him his just rights, fetters or abridges his public usefulness. But, Sir, I would have a Council entrusted with a charter, take higher ground than any to which they can be raised by external forces; I would have them assert the prerogative of their unquestionable duty and their undisputed ability. Let inductive philosophy and impartial justice be the presiding principles. Let their proceedings be open for the single reason that there is nothing to conceal. Let the papers be referred to any two or more Fellows who may appear best adapted to the subjects treated; and if any member of the Council know anything, either of a scientific or social kind in the relations of the author, and either of the referees suggestive of objection, let him be encouraged to mention it, that another may be appointed. Let the names of the referees and their reports be made public; and here, Sir (being myself one of the referees of the Society), I think it my duty to observe, that whilst I would desire to respect the feelings and sentiments of those who may feel differently, I am bound to declare, that, after all the consideration that I am capable of giving the subject, I am totally at a loss to conceive what objection any honestly-intentioned man can have to his reports on papers being made public. Then, Sir, I would have our discussions made more worthy of us. Why should the presidents not render themselves familiar with the papers before they were read, in order that they might, if necessary, lead out from the more salient points of the paper, and direct their discussion. As this would involve more labour and special fitness for the subject, why should there not be a medical and a surgical president as well as two secretaries; and, further, let the long-desired object of presidents *in esse* be at once granted. I mean an annual instead of a biennial change. Let

the *facts and conclusions* of the author, rather than his *opinions*, be the subjects of discussion. Then, Sir, let the Council insist, at least, on the first element of induction,—a more comprehensive record of phenomena. As well might a magistrate interpret the proper application of the law from whom half the facts of the case were concealed, as we to attempt the interpretation of the laws of nature on the grounds furnished by the facts, as recorded in our cases. It is impossible, on such data, to advance one step safely towards generalization. Facts might be recorded, on tables constructed for the purpose, and thus we might easily lead men who will not think of induction, to furnish the materials for others. Among many other things, I urged this on the Council, and was ready to prepare tables; but those who were present well know how the proposition was opposed by some, and coldly received by others,—some even from whose public position at least cordial co-operation might have been expected. Still, this is a step on which I think the Council will soon be disposed to look favourably, and it would be the best beginning. Lastly, Sir, I would, in all respect and good-will, intreat the Council to reflect whether they can expect materially to improve a science by means which have never yet succeeded, and to think whether, instead of neglecting the precepts of inductive philosophy, it is not much more likely, as Lord Bacon has said, that things "not hitherto achieved can only be accomplished by means as yet untried." I am not blind to their difficulties. I know them well; but I deny that they are insuperable. I know we cannot as yet do all that we desire; but I say, emphatically, again, *Est quadam prodire tenus, si non datur ultra;* and for that you are bound to strive above all. I would say, gentlemen, let us look around us. "*Si argumenta quæritis circumspicite.*" Do you see no signs of a retiring confidence on the part of the public? Do you read nothing in the thousands annually lavished on homœopathy, hydropathy, and other-little-bits-of-truth-coloured mimicries of medical science; with *proh pudor!* mesmerism to boot? Do surgeons see no objection to that attention which appears to be solicited to their lowest duties—duties so placed by Hunter and every man with a pretension to science half a century ago? And are things arrived at that pass, that lasting and real reputations are to be obtained by no better means than cutting and chloroform?

I believe that the public are slowly awakening to the difference between science and conjecture; that they are desiring something more definite; and that, in the mean time, they see no distinction between the value of one conjecture and another; that ignorance and credulity are joining with intelligence in requiring more intelligible tests of our claims; and that, if we neglect the call, we shall be soon addressed in the language quoted against a prominent upholder of the system *quousque tandem abutere patientia nostra.* To conclude, I would observe, as I had only one object in writing these letters, so I had only one in assuming the *sobriquet* of "Spectator," viz., that the remarks might be taken for what they were worth, without prejudice or prepossession; and I will only add, that, yielding to no one in my wishes for the progress of science, or the real elevation of the Profession, I believe that few assemblies of men, were their efforts properly directed, could do more towards the promotion of these objects than the Council and Fellows of the Royal Medical and Chirurgical Society. I am, &c.

George Macilwain,
Fellow of the Royal Medical and Chirurgical Society, and late Member of the Council, and Vice-President.

ON THE EFFICACY OF HOT WATER APPLICATIONS IN PRODUCING DIAPHORESIS IN FEVERS.

[To the Editor of the Medical Times.]

Sir,—I perceive in a recent number of your valuable journal a letter from Mr. Alfred Markwick, in which he suggests the employment of the spongio-piline (of which I believe he is the patentee) as a means of producing a speedy diaphoresis in cases requiring such a mode of treatment.

As I was anxious to test the value of the application thus suggested, I made inquiry of a respectable druggist in Reading as to the price of the fabric, and was not a little surprised to hear that a bag or sack, such as is recommended in Mr. Markwick's letter, would require no less than 4 yards of the material for its construction, which, at the retail price of 18s. per square yard, would amount to 3*l.* 12s., thus constituting a somewhat expensive means of effecting what may be equally readily accomplished by a much more simple method, at about 1-60th part of this expense, which means I will presently endeavour to describe. I have no wish to undervalue the general utility of the spongio-piline as a surgical application, and possibly the apparatus described may be obtained ready-made for use, at a much more reasonable rate at the inventing warehouse in London; but as medical practitioners in the country have no facility of thus obtaining it on sudden and urgent occasions, and as it is not probable that a country agent would hold such a quantity of the material in stock as would be sufficient for this purpose, I venture to propose the following less costly, more simple, and equally efficacious method of inducing a speedy and general perspiration, which, during the last twelve or fourteen years, I have constantly employed, and uniformly found to be successful even after the other ordinary means of effecting this object had failed.

In the number of the *Medical Times* for August 29, 1849, I related a case of scarlatina maligna, in which I had employed this method of inducing diaphoresis with signal advantage; and again, in the number for Dec. 1, of the same year, I gave the history, in detail, of several cases of the epidemic cholera, as it was then prevailing throughout the country, in which this mode of treatment was adopted, where I had an opportunity of most particularly observing its beneficial effects,—the result being, that, out of thirteen or fourteen cases treated in this manner, one patient only fell a victim to the disorder, and that only through the negligence of a servant, after twenty-three days had elapsed from the date of the seizure; but, as it may be inconvenient to refer back to these periods, I beg leave to transcribe, from the latter number of your journal the account of the method I then employed:—

"The sheets and counterpane having been removed, two large and thick blankets were laid, one over the other, smoothly upon the bed. The patient was then laid upon these blankets, thus disposed, and a flannel pad, made of four thicknesses of coarse household flannel, such as is used in cleansing floors, (the pieces being sewed together round the edges, to prevent their coming apart,) was wrung out of hot water,—as hot, indeed, as the patient could well bear it,—and rapidly laid over the pit of the stomach and upper part of the abdomen. This being done, the blanket nearest the body was carefully but quickly packed round him, one end being brought over his body, and tucked under on the opposite side; the other drawn over in an opposite direction, and likewise tucked under the body on the other side. The second or under blanket was then applied in the same manner, great care being taken so to bring them both round the throat of the patient as to confine the heat generated by the process, without any unpleasant constriction; the same care was taken to enclose the feet; over this envelope a number of other blankets, sometimes as many as nine or ten, or even more, were laid, these being only lightly tucked round, or simply placed over the other coverings of the patient. He was allowed to remain covered in this way until the perspiration appeared upon the face, when the outer coverings were gradually and carefully removed. Sometimes it was necessary to place more than one of the flannel pads over the abdomen, and in one of the worst cases, where the coldness was excessive,(a) it was necessary to place one on each thigh of the patient. When it appeared to produce a little excitement of the brain, which it sometimes did previous to the production of the sweat, a small towel wrung out of cold water, and placed round the head, immediately relieved this feeling. A cup of warm tea, given just before the envelopment, appeared, in some cases, to hasten the effect of the envelopment."

It will doubtless be argued, by those who have been in the habit of employing water applications to the cutaneous surface in the treatment of fever, that the method I suggest of inducing a speedy diaphoresis is not entirely new. To this I can only answer, that, at the time I first adopted it in my own practice, thirteen or fourteen years ago, I was unable, after a diligent search through the different works which treated of these diseases, to perceive the slightest allusion to the use of external hot-water applications for inducing a resolution, or at least a mitigation of the symptoms of the disease, by what, in fact, might not inaptly be termed a system of hydrosudopathy, although every one of the writers of these works appeared to acknowledge the expediency of endeavouring to act upon the skin by the use of diaphoretic drugs. Certainly, within the last few years, hydropathic writers have described a method of inducing these effects by the envelopment of the body in cold water wrappings; but as this latter method and that which I advocate are so essentially different in their mode of application and effects, it is scarcely necessary to enter into a discussion upon their respective merits; but I have little hesitation in believing, that the hot-water process which I have described will be found, upon a fair trial of each, to be the speediest, and certainly, in some constitutions, the safer of the two systems.

The following are some of the observations I have made in respect to the *modus medendi* of this method of treating febrile diseases:—1st. I have noticed, that in a great number of cases, when taken at the commencement, the fever has been cut short at once by

(a) A bad case of cholera, with extreme collapse.

the production of a critical diaphoresis, as I observed in the typhus and typhoid epidemic fever which prevailed in the year 1847, when, from the experience of the premonitory symptoms which I had gained from the general study of the epidemic, I had reason to suppose that the disease thus checked would have gone through its regular stages if these means had not been employed.

2ndly. I observed, that where the disease had proceeded a little further, and the characteristic symptoms of the fever had set in, where there was a persistent burning heat and dryness of the surface, with a foul tongue, a deep-seated pain on pressure over the abdomen, and a persistent dull uneasiness without it, doubtless from congestion of internal organs, which one would naturally expect to be the result of a suppression of the proper secretory functions of the skin, and the disturbance of its capillary circulation, and which dull pain and uneasiness are but the precursors or first perceptible signs of the morbid changes, such as ulcerations of the intestines, &c., which are found after death in persons who have died from typhus and typhoid fever; in such cases as these, I have found that the restoration of the natural functions of the cutaneous surface by the means I have employed, has, *pari passu*, relieved this congestive condition of the internal organs, and with it the pain, and that, even in these somewhat advanced cases, the usual duration of the disease has been much abbreviated.

3rdly. I observed, in several of the cases which came under my notice during the prevalence of that epidemic, that, according to the natural progress of the disease, the burning heat and dryness of the skin would continue, more or less, during the whole period of the disease, notwithstanding the use of the most energetic internal or medicinal diaphoretics to overcome it, the abdominal tenderness and uneasiness which I have described continuing all the time of the stoppage of the perspiratory function. I also observed, that in proportion to the interruption of the capillary secretory functions of the skin, the secretion of urine was interrupted from the same error in its capillary circulating functions, but that, as soon as the former was restored by the operation of the sudorific means employed, the latter was increased in proportion, and thus it seemed, that in these two ways combined, the system was rid of the poison, which had previously seemed to oppress it, and thus, even in these apparently extreme cases, the patients, generally speaking, recovered.

4thly. I had observed the frequent failure of internal diaphoretic remedies, and not only their failure, but their occasional bad effects, produced by their lowering tendency; thus, tartar emetic given in any of its medicinal combinations whatever, when it failed either altogether or partially in its diaphoretic effects, as it generally did, so disordered the stomach, and diminished the healthy vital force of the circulating system, as to render the body incapable of throwing off the poison of the disease, which otherwise it might have been able to do, through the means of a critical and sufficient diaphoresis, if these or similar remedial measures had not been previously employed; and so again with opium and its combinations, where they failed of their diaphoretic effects, they appeared to oppress the brain and nervous system, and through them the circulation, by which the stupor and depression of the system naturally attending the disease were increased, and the proper action of the kidney and other emunctory organs was suspended by their use.

It was from thus remarking the failures of these remedies, and their occasional bad effects, that I was induced to adopt the simple means which I have described, and which I now diffidently recommend for the treatment of febrile disorders, more especially in the early periods of their development, and in the more advanced stages, where a persistent heat and dryness of the cutaneous surface constitute the most remarkable symptom of the disease.

I am, Sir, &c., F. A. Bulley,
Surgeon to the Royal Berkshire Hospital.

Reading, Nov. 20, 1850.

LONDON AND EDINBURGH SURGERY.

[To the Editor of the Medical Times.]

Sir,—My attention has just been called to an article, headed "London Practice of Surgery," in the recent number of the *Monthly Journal of Medical Science*, of which I see Professor Syme is one of the conductors. This article is evidently put forward as a criticism of my practice in two cases of stricture which came under my care at the Royal Free Hospital, and were reported and commented upon in the May and June numbers of your journal, but *is*, in fact, an advertisement of the Professor and the "pure perineal practice," which he has for some years past been pertinaciously but vainly attempting to force upon his professional brethren. It can hardly be imagined that this article could have found its way into the *Journal* without the cognizance *at least* of the distinguished Professor, as he is the only *pure* surgeon amongst the published list of conductors, and the article occupies the principal place in the surgical department of the number referred to. I shall, therefore, feel myself at liberty to treat the criticism in question as though it emanated from Mr. Syme's own pen, and endeavour to see how far his views, in reference to the treatment of stricture, entitle him to the position which its arrogant style would fain make us believe that he is fitted to occupy.

It is well known that, since the year 1844, Mr. Syme has been endeavouring to convince the professional world that he has discovered a method of treating stricture superior to those modes of treatment which have been so long in vogue—a method generally known as the "pure perineal section." In the article before me, the writer characterises the "old operation," *i.e.*, the operation commonly resorted to, as "certainly destructive;" Mr. Syme's as "perfectly safe and certain;" whilst Mr. Syme himself applies the terms, "protracted, uncertain, dangerous, and unsatisfactory" to the former operation; to his own, the terms, "perfectly safe and completely effectual." If Mr. Syme's reports had been allowed by others as well as by himself, to justify such conclusions, these eulogies would ere this have met with an accordant response from the Profession at large; and it might have been well nigh criminal in any one to have refused the guidance of his experience and precepts. But, unfortunately for Mr. Syme, though fortunately for their patients, the London surgeons, ever ready to be taught by "wise men," even of the North, were not to be caught by the glare of the celebrated announcement of '44; and they even so far hesitated to follow it, that in '49 the Professor had to bemoan their obstinacy in the following terms:—"*it* (the operation) *has not been adopted by others, even in a single instance.*" It has, however, now been had recourse to in several instances in London; and it is my purpose to inquire, whether the amount of success in those, taken together with Mr. Syme's reports, should lead us to acquiesce in Mr. Syme's estimate of it. And here I must refer to the masterly papers on stricture by my friend Mr. Henry Smith, which appeared in the May and June numbers of your journal. The cases adduced in them are so important, the conclusions so just, and the views of Mr. Syme thereby so thoroughly refuted, that it was hardly to be expected they would again be brought forward, at all events so offensively as they have been in the article under notice. Now, Sir, leaving Mr. Syme's fifteen successful cases for after consideration, and omitting altogether Mr. Lizars's four cases, in neither of which that gentleman avers any permanent benefit followed the operation, I shall content myself with examining the results in the only other cases that have come to my knowledge wherein the perineal section has been performed. They are as follows:—

Cases.	No.	Cured.	Not Relieved.	Dead.
Mr. Hy. Smith's	4	3	..	1
Mr. Coek's	2	1	..	1
At University College.....	1	..	..	1
Dr. Dunsmure's	3	1	2(a)	..
Totals	10	5	2	3

Here then are ten cases, out of which three have died, two have not been materially benefited, and five have, as far as we know, recovered. Hence we see that the operation, in skilful hands, is sometimes followed by fatal results. It will not do in defence of it to say, that the cases were unfitted, for Professor Syme avers, that it is an "effectual remedy for the disease, even in its most inveterate and obstinate form." Nor can it be said that in the fatal cases before us, or at least in one, there were circumstances at the time of the operation prejudicial to its success; for, in the one case just alluded to, (Mr. Fergusson's,) nothing in the state of the organs could be found on *post-mortem* inspection to account for the fatal result; so that, in a person having a stricture, but otherwise healthy, laying open the urethra by an incision has been, and may be again, a fatal operation; and if the ten cases before us (as most I think will concede) may be regarded as "a fair trial," I am led to think that the proportion of deaths will justify us in placing the operation in question among the most dangerous and deadly within the domain of surgical art. It may, however, be said that Mr. Syme could only judge of the value of his remedy

(a) I have good authority for announcing, that in the cases operated upon by Dr. Dunsmure, and reported in a later number of the *Monthly Journal*, the results are *now* known to be as above.

from his own experience, and that, as far as that went, he was justified in calling it "an expedient" sufficient to accomplish "*quickly, safely,* and *surely,* what has resisted all the prolonged, complicated, and hazardous procedures which ingenuity has devised or patience endured." But I complain that Mr. Symes' experience, had he applied it honestly, could have led to no such inference, for in one of his cases, we are told, the patient was attacked by erysipelas in a most formidable manner, "accompanied by constitutional disturbance so violent as to prove all but fatal, and productive of emaciation, with prostration of strength to an extreme degree;" and this "unpleasant result," as the Professor designates it, did not quite wind up the case, for, as a memento of his escape, the poor fellow's recovery was imperfect by the *trifling* circumstance of a fistulous passage in the tract of the wound, which "was apt to open from time to time, and discharge a little urine." How could Mr. Syme, after this, republish, *in an unqualified manner,* the statement, that he had "repeatedly performed it (the operation) with perfect success, and *never with any unpleasant consequences?*" (Work, p. 13.) Such operations are only justified in cases where death appears to be the only alternative to relief.

But, Sir, Mr. Syme writes in the most complacent manner possible about slitting up a urethra by means of an external incision from the bulb to the anus, and yet brings the well known fact of the general sympathy of the system with every change that takes place in a stricture, as a powerful argument against the use of the bougie. Do not the Professor's premises tell still more forcibly against the knife? Would not such a wound as I have described be infinitely more likely to waken the constitutional sympathies to mortal reaction than the passing of a bougie?

Leaving out of the question for a moment the fatal consequences which have been shown occasionally to follow this operation, under the best circumstances that can attend its performance, let me now inquire whether it really accomplishes its object more successfully than a well-pursued system of dilatation? I think, in the long run, it does not. Mr. Syme might indeed be well satisfied, if he believes that the widening of the urethral canal which *immediately* follows the perineal section is in every case its real *denouement,* and may agreeably persuade himself that this temporary improvement is tantamount to an effectual cure; but I can assure him, if he thinks so, in some instances, at least, he is deluded; for even now I am grossly deceived if I could not find two or three of his patients wandering about London, or under treatment, after having been "effectually and safely cured" by the perineal section, with their strictures as bad as ever. I rather think that in such cases a patient perseverance in the use of the bougie or catheter would do as much as, and probably more than, this operation, without anything like its risk; and that the failure of dilatation, of which Mr. Syme complains, in all cases depends mainly upon non-perseverance in the employment of the process.

But how can Mr. Syme speak so disparagingly of what he somewhat too hastily calls the "old" operation for stricture? He might speak from his own experience of its certainly deadly effects; he cannot speak from facts which are open to all the world through the medical press. I have only to look to the records of English surgery for a few months past to find instances utterly at variance with the terms of condemnation which Mr. Syme uses in reference to it.

In July, Mr. Fergusson performed the ordinary operation successfully, after endeavouring in vain to pass an instrument into the bladder. Would this case have been in better hands had it been in Mr. Syme's. In October, 1850, a case of stricture with retention was operated upon in the Derby General Infirmary, according to the "old" plan, with perfect success. In April, 1850, Mr. Fergusson operated in a case of stricture, with perineal fistula and calculus, with equal success.

I need go no further to refute this dogmatical assumption of the Professor.

We are, moreover, referred to "the principles" upon which Mr. Syme founds his operative procedure in cases of stricture; but, on carefully looking over his work, I do not see that any "principles" have been, as such, enunciated. If *rules* or *deductions* from his practice are meant, which are altogether another thing, the following occur at page 58:—

"1. That division of a stricture by external incision is sufficient for the complete remedy of the disease in its most inveterate and obstinate form.

"2. That in cases of less obstinacy, but still requiring the use of bougies, division is preferable to dilatation, as affording relief more speedily, permanently, and safely."

Let us now see from what premises Mr. Syme arrives at such sweeping conclusions, and how far they are justified.

From 1844 to 1849 Mr. Syme's practice has yielded the following fifteen cases,—eleven uncomplicated:—

1. Described as a "tight stricture," between five and six inches from the orifice of the urethra.
2. Stricture at the bulb.
3. Stricture four and a half inches from orifice.
4. A tight stricture at the bulb.
5. A tight stricture at the bulb.
6. A stricture at the bulb.
7. A stricture at the bulb.
8. A stricture.
9. A very tight stricture at the bulb.
10. A ring of condensed texture.
11. Stricture at the bulb.

Four complicated:—

12. Fistula in perineo with stricture of the urethra.
13. Stricture of the urethra with fistula in perineo.
14. Fistula in perineo with stricture of the urethra at the bulb.
15. "Great induration of the perineum and scrotum, with two fistulous openings about an inch from each other," and a stricture "about four inches from the orifice of the urethra."(a)

Although we are told "more cases" could be adduced, it is very odd that those given have so striking a resemblance the one to the other; and are, one and all, the most simple forms of stricture that can be met with. The curiosities of surgical experience could, I should imagine, scarcely furnish another instance of similar good luck in the run of stricture or any other cases. There does not appear to be a difficult case in the whole lot; one that could not have been cured by the bougie; and, had each been so treated, they would, it is most probable, have furnished better evidence of the value of the dilating than they now offer in favour of the cutting process. There is, I believe, not one case among them in which any other surgeon would have thought of performing a deadly operation, or would have had any difficulty in curing without; no instance of such cases as are represented again and again amongst the morbid specimens in the metropolitan museums, and often met with among the patients of the London hospitals, in which for an inch or more of its length "the canal is almost obliterated, and the tissues around the part are thickened, indurated, and contracted,"(b) or in which, with immense masses of cartilaginous induration, there are one or more false passages, with abscess of the prostate and a fistula or two to boot. And yet, forsooth, Mr. Syme would have us to believe, from this miserable experience of his, that his operation, is sufficient for the complete remedy of the disease in its most inveterate and obstinate forms. Such a conclusion from such wretched premises is monstrous, *if not more,* and the London surgeons know it.

A word or two about my own cases and I have done. Neither one of them belongs to the two classes to which Mr. Syme's cases appertain, and therefore the applicability of Mr. Syme's remedy to them is (granting it to be admissible in any) purely hypothetical. The first consisted of an old stricture, with an extensively indurated tract of tissue, of cartilaginous hardness and feel, almost completely obliterating more than an inch of the canal, an old fistulous opening, probably a false passage, and a diseased bladder. Mr. Liston had in vain attempted to obtain a passage into his bladder about two years before. (I was out of town at the time of the patient's death, and did not see the *post-mortem* appearances myself.) The other was a simple stricture, rendered temporarily impassable by spasm, the result of debauch. Does Mr. Syme, or his critique, mean to say, that in the former case his operation could have been performed, or, if performed, that it would have resulted in a more favourable manner than the treatment which was adopted? And would he have subjected the second patient (who has since had the uninterrupted enjoyment of a free urinary passage) to the hazard of an operation which Mr. Syme, in one part of his work, admits is "occasionally followed by such consequences as an all but fatal" attack of erysipelas, and a permanent urinary fistula; and is shown to have been, in equally capable hands with its distinguished patron, again and again fatal? The question of puncturing the bladder, as a safe means, and probably the best, for the relief of spasmodic retention, when catheterism, leeches, baths, and opium have failed, I will not discuss now; I may do so hereafter. In conclusion, I cannot but think, in common with Mr. Smith and many other surgeons, that the danger attendant upon Mr. Syme's operation is more than sufficient to discountenance its adoption,

(a) This patient, we are told, died in August, his stricture having returned as bad as ever; and *this* Mr. Syme, who denies *some* portion of the statements which have been made in reference to the case, does not deny.

(b) Catalogue of St. Bartholomew's Hospital.

except, it might be, in the most urgent cases, and then only as a possible modification of the ordinary method of operating.

Mr. Syme may repeat, and even advertise, his invite to Edinburgh of all those who, suffering from stricture, cannot get relief in this remote and unenlightened part of the land; but I should quite join in the advice given by another London hospital surgeon on a similar occasion, to any adventurer accepting the invitation, "First make your will." I am, &c. JOHN GAY.

THE KEY TSI SING, OR JAPANESE EMMENAGOGUE A REMEDY FOR STERILITY.

[To the Editor of the Medical Times.]

SIR,—Some time since, you did me the favour of inserting a communication respecting the above remedy, in which I offered to supply any medical practitioner with some, to test its efficacy in this northern climate; the result was several hundred applications, and of whom ninety-five had a supply. Forty-seven only have fulfilled their promise of acquainting me with the results, all but one testifying to its beneficial effects in suppressed catamenia, and several recommending it as highly useful in the suppressed lochia after parturition. I should also feel obliged by the insertion of one communication, selected from its peculiar interest, kindly forwarded to me by the physician (Dr. White) of the Winchester County Hospital. I am, &c.,

E. WILLIAMS, M.D.

15, Upper Clifton-street, Finsbury-square.

Case.—Charlotte M., a stout girl, with a florid complexion, 20 years of age, and single, lives at home with her mother; she was 13 years of age when the catamenia first appeared, from which time until she arrived at 16 years of age they appeared regularly every three weeks, and lasted a week. When she was 16 years of age, she gradually got out of health through constant attendance upon her father in his last illness, and on his death she had occasional epileptiform fits for about two months; the catamenia then ceased, and can scarcely be said to have occurred since, except once, about a year ago, when she had gone into the country for change of air.

From the cessation of the catamenia, nearly four years ago, until the present time, she has generally had epistaxis or hæmoptysis every three or four weeks; during the first part of the time it was always epistaxis, but latterly it has generally been hæmoptysis. Her chest is well developed, and careful and repeated auscultation examination has failed to detect any signs of tubercle.

She has been under my care for some months as an out-patient of the County Hospital, but I completely failed in my endeavour to restore the catamenial discharge, although, in addition to internal treatment, she had hip-baths and vaginal enemata of mustard, water, &c., leeches to the vulva, and currents of electricity passed through the pelvis.

All having failed after a six months' trial, I resolved to make an experiment with the key tsi sing. On November 6th she commenced taking ʒiij. of this medicine every six hours in a little hot gin-and-water, and continued to do so for three days; when, not having experienced any effect from it, except some pain in the back, she omitted it for two days. I urged her to persevere with the medicine a little longer, and she recommenced taking it every four hours. On the second day, November 13, the catamenia appeared, and flowed normal for three days.

She felt no inconvenience from the medicine except some slight pain in the back and left side. Having used two-thirds of what you supplied me in this case, I should be obliged by your forwarding me some more, as I have other cases particularly suited to its exhibition. A. D. WHITE, M.D., (Cantab), F.R.C.P.,

Winchester. Physician to the Winchester County Hospital.

Remarks.—The foregoing case, and the numerous others I daily receive, as well as the number of cases I have had in private practice, fully prove the inadequacy of the present remedial means in the treatment of a class of cases of frequent occurrence, and of no small anxiety to the medical practitioner, and it will be no little gratification to me to have been the humble instrument of introducing to European practice a remedy so little likely to fail if used properly and perseveringly. The only drawback I feel is, that it might be used by the badly disposed in procuring a result that, however it may be lamented should occur, must be deprecated by every right-minded practitioner; to avoid which means must be taken, and your advertising columns of next week will give to the Profession the fullest information. E. W.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

DR. J. R. BENNETT, President, in the Chair.

UNUNITED FRACTURE.

Mr. Gay exhibited two portions of bone, the ends of a femur, on which the operation of resection had been performed for ununited fracture. The bones were roughened at their extremities by small portions of osseous tissue, which had been irregularly thrown out. These small masses were not deposited in such a manner as they would have been, had any tendency to re-union manifested itself, and were more porous than healthy bone. Ten weeks elapsed from the time of the operation to the amputation of the limb; and, although the condition of the external wound gave indications of a healing tendency, yet, at the end of that period, the state of the limb showed that no union whatever had taken place. The ends of the bones, for the period alluded to, were kept firmly in apposition. The patient was a fine healthy individual, but why no more reparative efforts had been made Mr. Gay was at a loss to conjecture.

In reply to a question from Mr. Canton, Mr. Gay said that resection of the bones was resorted to, because the ends of the bones overlapped each other to a considerable extent, and the state of the muscles would not allow of their being brought into apposition.

EXCISION OF THE HEAD OF THE FEMUR.

Mr. Haynes Walton said, that the subject which he had selected for the consideration of the evening was, the propriety of removing the head of the femur in certain cases of disease of the hip-joint. During the last few years the attention of the Profession had been specially directed to that operation: some able surgeons having advocated it, and successful cases had been recorded in its favour; whilst others of equal celebrity had either condemned it altogether, or had been silent respecting it. In that conflict of opinion, while himself approving of the operation *under certain restrictions*, he brought the subject before the Society rather for the purpose of eliciting their views, and to get the matter fairly discussed, than to state dogmatically his own. The question which he begged to propose was, *At what stage of the disease of the hip-joint may the operation of removing the head of the femur be performed?* To answer this, two conditions must be taken into account; first, the state of the local malady, and next, that of the system at large. *First, then, of the local affection.* — In the aggravated cases of hip-joint disease, (the milder ones did not fall within the scope of his remarks,) the conservative powers of the system are sometimes exercised in an astonishing degree; but, unfortunately, they often failed, and the patient died worn out by protracted suffering, little or no attempt at repair being made. It was then in those cases where the powers of the system have been prostrated from the local irritation, where the last chance of a natural though vicarious cure has departed, that he thought surgical aid by means of an operation *may sometimes* be resorted to. It was not necessary in a Society like that to prove formally that it was disease of the osseous tissue of the joint that perpetuated the evil of morbus coxarius, and in the treatment of which we were so much baffled. All present must know the severe and continued sufferings that a limited extent of diseased bone will cause. He should adduce merely two instances. In the *Edinburgh Medical Journal*, Vol. XXXVI., p. 257, Mr. Syme spoke of a thigh-bone in his possession which he had taken from the body of a woman who had laboured under caries of the trochanter major for thirteen years; yet the whole disease could be covered by the point of a finger, and was not thicker than a sixpence. He had met with a more remarkable case than even that, as far as time was concerned, that was, with a little more disease in the neck of the femur, but very little more, seventeen years were spent in suffering. *Then of that general condition of the system that co-exists with the local affection, with reference to the admissibility of an operation.* Suspicions of the unsoundness of the lungs, or of some of the abdominal viscera, may fairly be entertained or suspected in most, or all the cases in the last stage of morbus coxarius, and hence the imperative necessity of accurately examining these organs in order to obtain correct information. If disease be detected, it was obvious that operative interference would be imprudent; even with negative evidence of soundness, it might be a question whether it would be advisable to interfere. Equally important to rejecting a patient that was diseased, was it not to submit one to operation who, although sound in vital organs in the strict sense of the word, was prostrated beyond the chance of recovery. He would ask if the low and depressed state in which those patients

lie for months may not cause such mal-nutrition and mal-assimilation as to lay the foundation for the internal development of tubercle; and if that were so, surely that was an additional argument against the operation being deferred too late. The next important question to be ascertained was, the extent to which the bony structure of the hip-joint was usually diseased, and under what amount of implication might we be justified in operating at this critical period? We found in surgical authorities that the acetabulum was as frequently the seat of disease as the head of the femur, but he ventured to question the accuracy of that statement. The specimens met with in our museums ought not, he thought, to have much weight, because they were not sufficiently numerous, and because, generally speaking, the more aggravated a disease, or the greater its rarity, the more readily was it chosen for a museum. But, apart from that, there can be no doubt that there was a reparative power displayed in an unhealthy acetabulum that was not met with in a like manner in the head of the femur when it is diseased, the morbid acetabulum often getting well while the other bone remained unsound, and caused the death of the patient. The implication of the os innominatum was the great argument used by those who have doubts about the propriety of the operation, or who discountenance it altogether; and whether the part was or was not diseased, necessarily hinged the great difficulty of deciding on operative measures. He thought it most probable that few operations would succeed, were they executed when the acetabulum was unsound. When the usual characters that denote disease of the pelvis are absent, and when the head of the femur was dislocated, he thought it may generally be assumed that the acetabulum was healthy. Yet that negative, and he admitted not uncertain evidence, may not, from individual peculiarities of cases, be capable of any general application; but fortunately, a critical point in the diagnosis, *the position of the head of the femur*, may frequently be ascertained. The finger may be passed through some one of the many sinuses that now riddle the soft parts over the joint, or it may be ascertained by a slight exploratory incision either in a sinus or through sound skin,—a practice which, in many cases, with reference to saving life by the operation, he held to be perfectly justifiable. Another advantage of the exploratory incision was, that the state of the acetabulum may also be ascertained. It must be borne in mind, that the natural fulness of the hip, with its thick muscular mass, no longer existed; the patient was little more than a skeleton, and that the *sounding*, if he may so call it, could be done, with great ease, by little cutting, and at most it would cause but little bleeding. The difficulty of ascertaining the existence of dislocation may be unaccountable to those who had not investigated the subject with reference to that point. The cessation of the growth of the femur, the loss of a portion of its head, the shortening and loss of obliquity of the neck of the bone, the flatness of the nates, and the direction of the foot,—for it may be inwards or outwards,—may all be the means of misleading the best practical surgeons, and inducing them to believe that there was dislocation when there was no such thing. He would adduce proof of that. In justification of the operation, in other words, concerning the principle under which it may be performed, he would refer to the daily practice of surgery for like examples, not only in the removal of diseased bone, but even of entire joints. Nature herself, the most infallible of all guides, gives illustration in her throwing off diseased bone; large portions, nay, even the heads of thigh-bones in states of disease, have been thrown off. The conclusion at which he arrived was, that there were cases of hip-joint disease where the disease was limited to the head of the femur, the acetabulum healthy, or no longer implicated,—that is, having recovered if it had been diseased,—the head of the bone dislocated and lying in a sinus or abscess cavity, the patient sinking from exhausting suppuration, there being no internal disease, or other manifestation of external local injury, than that in the hip, that the removal of the head of the femur would save life. Mr. Walton then gave the particulars of twelve cases that had been operated on, six of which had died, and six recovered. Two others were mentioned who had undergone operation, but the results of which he could not learn. He then went on to say, that the formation of a false joint, a wonder to those who have not looked into the subject, appears to be about the earliest reparative act, just perhaps the reverse of what the physiologist or pathologist would expect. Time would not allow him to go into the practical surgery of the operation; but he could not refrain from remarking, that the removal of the head of the femur, when dislocated and lying loose, as it were, is a very much less severe operation than is imagined. In several cases in which he had seen it done, (he had been present on eight occasions,) not a ligature was required, and the amount of blood lost was surprisingly small; were it otherwise, that is, with regard to the loss of blood, that alone would be sufficient to render it inapplicable to the class of cases under consideration. The wasted and riddled buttock of which he spoke, when alluding to the diagnosis of dislocation, greatly facilitated and made easy the process of operating. In several of the cases little more was required than to open a sinus, to raise the head of the femur, and saw it off. Removing the head of the femur could scarcely be classed among the mutilating operations, for what was taken away was not, strictly speaking, under the circumstances, missed, and no more deformity was produced by its loss than existed in those cases in which there was recovery after an advanced stage of hip disease with dislocation. The amount of bone that should be removed must depend on circumstances, but, *cæteris paribus*, he would say that the removal of the head will suffice. Mr. Fergusson thought, that if the trochanters were removed as well, the limb would be more easily brought in a line with the pelvis, and the cure thereby facilitated. Except that extension or counter-extension were not needed, the same treatment was necessary as when there was compound fracture of the thigh. Heretofore he had avoided using the term caries, except in quotations, for that word has received such dissimilar significations, that he scarcely knew how to apply it; besides no one single term could express correctly the conditions of the bones in morbus coxarius, for most unquestionably they were found in very different states, as he would show, when introducing the specimens that were on the table. One author spoke of caries as mere ulceration, whether simple or malignant; another, as a rottenness, or mouldering or crumbling of bone. Mr. Stanley defined it in his work "On the Diseases of Bones," to be "the changes which, under certain circumstances, were consequent on chronic inflammation in the cancellous structure of bone." Several excellent casts, taken from patients that had been operated on, were produced.

Mr. B. Travers, after alluding to the history of resection, dating from Galen, re-introduced in 1818 by Mr. White, said, all surgeons of Hunter, Cline, or A. Cooper's time would have nothing to do with it. Scrofulous disease should be very cautiously approached by the knife. Left to themselves, the vis medicatrix naturæ often effected a cure. He instanced the case of a child in whom a sequestrum of the whole tibia had been formed; also another, in which all the clavicle except the sternal end had come away, and bony deposit subsequently perfected a cure. The cases recovering after operation were such as got well in spite of it, and would have healed sooner under constitutional anti-scrofulous treatment. He thought, therefore, the operation ought very seldom, if ever, to be performed.

Mr. Dampier, in supporting Mr. Travers' views, thought the test for the operation was the state of the acetabulum. If this were diseased it should not be performed.

Mr. Clarke considered that constitutional treatment had not been sufficiently insisted upon in Mr. Walton's cases, and asked for further details as to the duration of life after these operations.

Mr. Chalk thought 1. The operation should not be too hastily adopted, as the diagnosis between hip-joint disease and psoas abscess was often impossible. 2. It was dangerous, as giving rise to hæmorrhage, thus often causing the death of a patient previously much weakened. This was the result in one of Mr. Walton's cases. 3. Then the removal of local disease could not cure the constitutional taint, in which especially the power of reparation of the soft parts was very defective, and the limb usually remained little benefited, if not worse, after the operation. 4. Under proper constitutional treatment, we generally succeeded sooner in effecting a cure. He therefore opposed the operation in most cases.

Mr. Gay said that the subject then brought before the Society was one of much interest and importance, and the members were indebted to Mr. Walton for the manner in which he had, by his paper, opened the discussion. He did not think the question before the Society was, whether excision of the head of the thigh-bone was to be admitted as a useful operation or not, for instances, eight out of fourteen, had been adduced, which proved that it had been instrumental in saving life, and was under certain conditions safe; but what were the conditions under which it should be had recourse to. Mr. Gay could not quite agree in the observations of Mr. Travers', that injuries or diseases of the bones would repair themselves easily if left to Nature's resources. He thought of all tissues the osseous was with the most difficulty repaired; and it was owing to this circumstance, and the length of time occupied by the processes necessary thereto, that portions of the bony fabric were comparatively so often subjected to the knife. In a case of diseased hip-joint the period would sometimes arrive when the constitution became

so impaired by long and tedious suppuration, that some important organ would show symptoms of incipient, and if allowed to go on, of fatal disease; it is to prevent such a catastrophe that, other circumstances not forbidding, the surgeon would be called upon to remove the offending portion of bone. Mr. Gay thought, moreover, that this operation was not admissible unless the organs generally were in a healthy state, nor in a scrofulous subject.

A Member said, "These are all scrofulous cases."

Mr. Gay did not recollect that Mr. Walton had made such a statement, but, if such was the case, he would correct himself by saying, that, in his opinion, it ought not to be done, until the scrofulous taint in the constitution, to which it was to be traced, had been eradicated. Every surgeon knew the inutility of operating for diseased bones or enlarged tumours in a scrofulous subject; another bone became diseased, and another gland would generally become enlarged. The acetabulum should also be free from disease. Mr. Gay related an instance in which he removed the head of the humerus for disease of that joint, and left the glenoid cavity which was diseased. The wound healed, leaving an obstinate fistulous passage, which refused to heal, until the resection of the remaining articular surface had been accomplished. Under such circumstances as those to which he had alluded, Mr. Gay thought the operation might fearlessly be undertaken.

Mr. Henry Smith had seen all the cases but two of those mentioned by Mr. Walton. In Mr. Fergusson's first case, performed in 1845, the boy, then reduced to the last stage of hectic, so that death was at one time anticipated, and in which four inches of bone were removed, was now quite healthy and fat, and had been able to walk to his house from Holloway, a distance of four miles, without a crutch, but only with a stick. He had also seen the second case, quite recovered and healthy; the patient able to walk with the help of a stick. Mr. Morris' case, at Spalding, he had also seen, and the result was similar to the last. Of Mr. Fergusson's four cases, three had recovered. The fourth he had been unable to trace. He thought also the amount of disease in the acetabulum was the test for operation, but he believed any able surgeon could make out the presence of disease there. If anchylosis was left to occur, it usually produced great deformity and a useless limb.

Mr. Lloyd, 1st. Thought the operation justifiable, as *post-mortem* appearances of patients that had died of hip disease had revealed every organ to be healthy. 2. Scrofulous cases should not be operated upon, but treated constitutionally. 3rd. He thought many cases were not scrofulous. He had examined many cases of hip-disease, and found scrofulous deposit in the joints comparatively rare. 4th. He should never operate while active mischief was going on, but only when the disease had assumed a chronic form.

Mr. Coulson said, that the importance of this subject could scarcely be overrated, for amongst scrofulous affections hip-joint disease occupies a considerable part. In the infirmary at Margate there are about 230 in-patients, chiefly scrofulous, of whom, rather more than one-seventh are hip-joint cases; therefore, any attempt to relieve this frequent disease must always be regarded with interest. The first point to be considered is, what is the measure proposed for the relief of this disease by the author to-night? 2nd. What is the stage of the disease in which this measure is proposed? 3rd. What conditions must be present even in this stage to render its adoption justifiable? 1st. What is the measure proposed? It is the removal of a portion of bone more or less diseased, larger or smaller, if not implicating, at least in immediate contact with, one of the largest joints of the body, and for a disease, though usually intractable by surgical means, yet not incurable by constitutional treatment, and tending of itself towards a cure by the ordinary process of time. The operation in itself is of easy performance, and were it not for the proximity to the trunk, of the joint implicated, and above all, for the peculiarities of constitution existing at the time, it would be an operation devoid of danger. The gravity of the operation then in itself is not the question, and renders it more imperative that we should be clear as to the principles which guide us, lest we be tempted by the facility of its performance, to forget the responsibilities which we incur, and endanger the life of the patient, and our own reputation. 2nd. The next question is, at what stage of the disease the operation is recommended? It is recommended in what is described as the fourth stage, when the limb is shortened, the toes inverted, knee crossed, and almost riveted to the opposite side, and, if touched, causing great agony; the thigh itself, or the glutei, swollen; and the muscles and muscular sheath about the hip, or the upper part of the thigh, broken up by abscesses; sinuses in every direction, but too tortuous and too small for any finger to explore them; the spine twisted, and one iliac bone an inch or more above the other. In this stage there is great prostration of strength, and emaciation of the whole body, with night-sweats and other hectic symptoms; for, in this disease, it is not the articular symptoms which generally produce death, but the exhaustion of the frame and strength, which the surgeon, looking to a local cause only, imagines to arise from a resistance to an incurable local malady; whereas the local malady and hectic are but symptoms indicative of one and the same disease. Mr. Coulson laid stress on this last point, because, to whatever extent the local malady may aggravate the general symptoms, as it is not the cause of these symptoms, so neither will its removal prove the remedy. 3rd. If the operation is to be performed, —that is, when it becomes clear beyond a doubt that it is the presence alone of the local disease which maintains the irritation, and is the exciting cause of such disturbance, as to endanger life,—we must, even then, have a clear conception of the conditions, local and general, under which the operation is justifiable. The first condition is, the absolute displacement of the head of the bone; for, as long as the neck and the trochanter are in relation to the acetabulum, there is a chance of anchylosis taking place, which is the most favourable termination to be looked for. But dislocation is of rare occurrence, for how can that be displaced, which has entirely appeared in this process of disease? In a large majority of cases, the head of the bone has ceased to exist—it has been destroyed by ulceration, and the trochanter has been drawn up to a level with the brim of the acetabulum, carrying with it the shaft of the bone and the limb. Thus, if dislocation be a condition to justify the operation, then a large proportion of hip-joint cases must be placed beyond the pale of this operation. Now arises the second consideration: not only must the head of the bone be dislocated, but it must also be diseased, and be the cause of such disturbance in the soft tissues around the joint, and of disorder of the system, as to threaten the life of the patient. 3rdly. The next condition indispensable to justify this operation, is the soundness of the acetabulum. Every surgeon must feel the difficulty of diagnosing in parts so deep the absence or presence of disease here. How often is found, even when the bone has been dislocated, the existence of strumous deposit in the acetabulum, or, what is more important, caries which terminates in perforation and thinning of the socket, with the defective nutrition of the bones themselves. In some of the cases recorded to-night, the acetabulum was not free from disease; and in the following cases, sent to him (Mr. Coulson) by the excellent surgeon at Margate, (Mr. Field,) it will be seen how often the acetabulum was diseased. Jane Philipps, aged 16, died from exhaustion and constitutional irritation of diseased hip. Head of femur rough and deprived of cartilage; acetabulum deprived of cartilage and perforated. Edwin Clark, aged 29; diseased hip of seven years' duration; died of peritonitis; both acetabula and head of the thighbones were diseased; head of one femur dislocated and partially absorbed. William Wells, aged 17; diseased hip for ten years; died of chronic peritonitis from large deposit of strumous matter in the abdomen; head of femur and acetabulum both diseased, the latter with a large perforation. John M'Grath, aged 24; died of epistaxis; both bones diseased; the acetabulum perforated; head of femur entirely absorbed, the shaft atrophied, being not larger than a common-sized radius. It must not be supposed that what takes place in a healthy dislocation occurs in a diseased one, for the structures are in a very different condition. To fancy that the renewal of the upper extremity of the femur in disease, whether effected by surgical means, or of its own accord in the course of the complaint, places the acetabulum in a condition favourable for recovery, is a supposition not supported by pathology, but directly opposed to what is known of the disease itself, involving the hypothesis that disease of the acetabulum was lighted up by the morbid condition of the head of the femur, and would cease on the removal of this cause. Now scrofulous caries of the head of the femur is a constitutional disease, caused by the same morbid diathesis as the disease in the acetabulum. Now, let this point be viewed by analogy. In scrofulous caries of the elbow-joint, will the removal of

the carious portion of the humerus cure the same condition in the ulna and radius? And what surgeon is there who would content himself in excision of the elbow joint with removing one diseased surface, in the vain hope that the complaint would spontaneously cease in the remaining articulating surfaces? 4thly. There must be disease in the other portions of the bones of the pelvis or of the trunk, especially of the lumbar vertebræ. In the advanced stage of psoas abscess and disease around the joint, there is often great difficulty in distinguishing these affections from disease of the joint itself, as the two following cases, which were supposed to be affections of the hip-joint, show:—James Grove, aged 12, died from exhaustion and constitutional irritation of abscesses around the hip and thigh. Disease of posterior part of the ileum; joint sound. John Stephenson, aged 28, died of ulceration of bowels; abscesses in groin, nates, and thigh; disease of ramus and body of pubes; joint sound. But when the diseases co-exist, the difficulty and importance of the cases are much enhanced. 5thly. There should be no disease in any of the vital organs. It may be taken for granted that no prudent surgeon will operate where pulmonic disease, or any symptoms indicative of strumous disease involving the organs of nutrition are present. Mr. Coulson then analysed the cases related by the author, and expressed an opinion, that, excepting Mr. White's and Mr. French's cases, and three of Mr. Fergusson's, the conditions he had laid down as rendering the operation desirable were not present.

Mr. Walton having replied, the Society adjourned.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 13th inst.:—

Craven, John, York.
Dickinson, James Charles, London.
Earle, Joseph, Grosvenor-street-west.
Hudson, Edmund Lord, Bacup, Rochdale, Lancashire.
Langham, John Phillipson, Her Majesty's Forest of Dean, Gloucestershire.
Maund, Henry, Broomsgrove, Worcestershire.
Osborn, Ashby Greenaugh, Northampton.
Plumptre, Francis Henry, Queen's-square, Bloomsbury.
Robinson, Alexander Myall, Newbury, Berkshire.
Rygate, Robert, Colet-place, Commercial-road.
Weaver, John Davies, Chester.
Webster, George, Dulwich, Surrey.

At the same meeting of the Court, Messrs. George Everest, Michael Walling, and David Lloyd Morgan, passed their examinations for naval surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date, respectively, April 29, 1842; April 25, 1845; and April 17, 1846.

Medical Appointments.—By unanimous vote of the Directors of the National Guardian Assurance Society, Sir John Slade, Bart., M.D, and Dr. Stevenson Bushnan, have been appointed physicians, and Mr. Borlase Childs, F.R.C.S., surgeon, to the institution.

Military Appointments.—68th Foot.—Thomas Wildridge Shiell, M.D., to be assistant-surgeon, vice Robert Wm. Woolcombe, who retires upon half-pay. Cape Mounted Riflemen.—Staff assistant surgeon, Wm. Singleton, M.D., to be assistant-surgeon.

Naval Appointments.—Surgeon James Vaughan (1841), to the Amphitrite, 24, at Portsmouth.—Assistant-surgeons William Bainbridge (1846) and D. W. C. Tucker, both additional, to the Imaum, 72, receiving-ship at Jamaica.

Obituary.—At Uxbridge, on the 13th inst., Richard Andrews, Esq., surgeon, formerly of Great Stanmore, Middlesex, aged 76.—On the 28th ult., on board the barque Clara, off the island of St. George, John Garnett Courtenay, Esq., staff surgeon, late principal medical officer of New Zealand.—On the 12th inst., at Camden New Town, Robert Calvert, M.D., Deputy Inspector of Military Hospitals, aged 68.—On the 28th ult., drowned at sea, in the wreck of the Helena Sloman, Dr. Edward Lutz, of Wurtemberg, aged 36.

General Infirmary, Bedford.—There are vacancies for a surgeon and house surgeon at the General Infirmary at Bedford.

Distressed Medical Men.—Glancing over the obituary columns of the *Doncaster Gazette*, we found the following painful paragraph:—"At the Union-house, Gainsborough, Woodcock Simpson, formerly a surgeon at Misterton, aged 52." The heavy toil and constant labour of the country surgeon were, then, so ill rewarded, that he dies an inmate of the Union-house.

Accidental Poisoning.—A middle-aged man, residing near Boston, in Lincolnshire, was lately poisoned, in consequence of a rather singular mistake. Being troubled with ascarides, he was in the habit of purchasing opening pills. On the 16th inst. he applied to a druggist for a couple, but, owing to a defect in his utterance, from the loss of his front teeth, he was understood to say opium pills, and was supplied accordingly. A fatal result having followed, an inquest was held, and a verdict returned of "Accidental Death." The druggist promised, that in future no preparation of opium, however small in quantity, should be sold by him without the label "poison."

Glanders in the Human Subject.—A fatal case of this disease has lately occurred in the Edinburgh Infirmary.

Doctors going to Court.—Westminster County Court.—Gorman *v.* Nathan.—An Unfortunate Denouement at the Queen's Levee.—The plaintiff sought to recover 1*l.* commission for introducing Dr. Kirwan, the Coroner of Dublin, to the defendant, upon the occasion of Her Majesty's visit to Dublin.—Mr. Nathan, in answer, said he was a costumier, and, on the occasion mentioned, the plaintiff called on him, and it was agreed that Dr. Kirwan should have the hire of a levee suit for 3*l.* 3s., and that the plaintiff should have 1*l.* commission. On calling on Dr. Kirwan the day after the levee for the suit, he found him in bed with a broken nose, when the Doctor told him he had missed seeing Her Majesty, his sword getting between his legs and throwing him down on his face when he was going up stairs. The suit was found to be saturated with blood, when the Doctor gave him a promissory note for 7*l.* 8s. for the damage, but it was dishonoured. The Learned Judge said he hardly knew whom to pity most, the unfortunate doctor or the defendant. He could make no order in the case.—*John Bull.*

HEALTH OF LONDON DURING THE WEEK.

The mortality of London, which in the last week of November declined to 861 deaths, and in the subsequent week rose to 1004, now exhibits a further increase of considerable amount. The deaths registered in the week ending last Saturday, were 1090; a number which is greater than that of any corresponding week in the ten years 1840-9, with four exceptions: namely, in 1844, when a week of unusually low temperature (the mean not exceeding 28°) was fatal to 1201 persons; in 1846, when the deaths were 1163, that week being also marked by a low temperature; in 1847, when the deaths rose to 2416, at that time influenza being epidemic; and in 1848, when they were 1130, fever then prevailing to some extent, and cholera having appeared. Last week has carried off an unusual number of aged persons (those of 60 years and upwards); and the increase over the previous return is principally caused by bronchitis and pneumonia, or inflammation of the lungs. In the last three weeks the increase of bronchitis appears from the numbers returned as follows: 64, 88, 114; that of pneumonia is shown by 67, 86, 113; whilst the mortality from phthisis in the same periods has been more uniform, namely, 96, 113, and 116 deaths.

MORTALITY TABLE.

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	728	543	185
Females	706	547	159
Total.....	1434	1090	344

The Deaths in the several Districts are as follow:—

Districts.	Population in 1841.	Dec. 14, 1850.	Sum of Ten Weeks.
London...	1948369	1090	11665
West	301189	177	1679
North	376568	215	2182
Central...	371199	166	2147
East	393067	233	2564
South	503346	299	3092

Deaths in the week ending Saturday, Dec. 14, 1850.
(Metropolis.)

Causes of Death.	Dec. 14. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	492	318	280	1090	11665
Specified Causes	492	318	279	1089	11603
Zymntic (or Epidemic, Endemic, and Contagious) Diseases	155	38	7	200	2652
Sporadic Diseases:					
Dropsy, Cancer, and other Diseases of uncertain or variable seat	5	17	24	46	556
Tubercular Diseases	58	99	8	165	1739
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	51	36	53	140	1203
Diseases ot the Heart and Blood-vessels	5	24	17	46	342
Diseases of the Lungs, and of the other Organs of Respiration	126	60	85	271	2612
Diseases of the Stomach, Liver, and other Organs of Digestion	16	14	18	48	598
Diseases of the Kidneys, &c.	1	2	9	12	96
Childbirth, Diseases of the Uterus, &c.	...	12	...	12	118
Rheumatism, Diseases of the Bones, Joints, &c.	3	5	2	10	81
Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	9
Malformations	7	...	...	7	29
Premature Birth and Debility	29	...	1	30	244
Atrophy	19	1	3	23	156
Age	...	...	45	45	697
Sudden	5	1	1	7	152
Violence, Privation, Cold, and Intemperance	12	9	6	27	319
Causes not Specified	...	...	1	1	62

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	30	Heart	43	Phthisis	116
Bronchitis	114	Hooping-cough	42	Pneumonia	113
Cholera	2	Hydrocephalus	31	Scarlatina	29
Childbirth	7	Influenza	1	Small-pox	24
Convulsions	40	Liver	9	Stomach	5
Diarrhœa	10	Lungs	14	Teething	7
Dropsy	17	Measles	20	Typhus	37
Erysipelas	3	Paralysis	29	Uterus	5

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·232	35·5	35·5	— 3·7	A.M. S.E.	P.M. Calm.	Miles. 25	0·00	Positive, and tension strong at 9h. A.M. Nothing was shown at any other examination.
Monday	30·219	34·9	34·9	— 4·1	Calm.	Calm.	30	0·00	Nothing was shown throughout the day.
Tuesday.....	30·115	32·8	32·8	— 6·2	S.E.	S.W.	10	0·00	Positive, and tension strong at noon, and continued during the remainder of the day.
Wednesday.	29·897	40·1	38·7	+ 1·0	S.E.	S.E.	105	0·01	Positive, and tension strong at noon.
Thursday ...	29·870	45·9	45·7	+ 6·5	S.W.	S.W.	80	0·04	Positive, and tension moderate at 9h. P.M.
Friday	29·704	45·3	44·4	+ 5·5	S.S.W.	S.S.W.	150	0·00	Positive, and tension generally strong throughout the day.
Saturday ...	29·511	46.2	42·1	+ 6·0	S.W.	S.W.	295	0·38	Nothing was shown throughout the day.
Means ...	29·935	40·1	39·2	+ 0·7	...	...	SUM 695	SUM 0·43	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

TO CORRESPONDENTS.

Much inconvenience having arisen from letters being addressed to the Editor, and calls made upon him, at his private residence, it is distinctly intimated, that no communications, either personal or otherwise, intended for the editorial department of this Journal, will be received elsewhere than at the Publishing Office of the "Medical Times," 46, Princes-street, Soho.

We shall be exceedingly obliged to Correspondents who forward newspapers to mark with the scissars the paragraphs to which they wish to call our attention.

The Advertisement Quackery.—Some medical men seem to keep a secretary, as Moses and Son a poet, and send similar letters to the four weekly Journals. We regard such proceedings as quackish in the extreme, and incompatible with the status in society of a *regular* practitioner. Quadruple letters to Journals can only be regarded as advertisements similar to those of Professor Holloway's Ointments, or the Reverend Mosely Willis' Cures for Insanity. For ourselves, we never will publish communications that we know, or *suspect* to have been, addressed simultaneously to our contemporaries; who, if they would join with us in this resolve, and close their columns entirely against those who so offend, would do service to the Profession, and deal a heavy blow and great discouragement to quackery now so rampant even in our ranks. The evils of the duplicate and quadruplicate letter system may, so far as the press is concerned, be avoided with as much ease as the begging-letter imposture by those who are, by position, exposed to its annoyances. There is not an editor in London who does not know the men given to such misdemeanours; and simply by announcing the receipt of their communications before publishing them, they would nip the rank offence in the bud, and often check the progress of this species of barefaced and most unmitigated humbug.

Medical Protection Society.

[To the Editor of the Medical Times.]

Sir,—Though an old subscriber, and your constant reader, and, therefore, through your excellent columns tolerably well acquainted with, and interested in, the medical news of the day, I am not very much disposed to commit my lucubrations to print, though some doses I receive at your hands are far from homœopathic, and make one's blood uncomfortably hot.

Such have been the effects of certain declarations issued by a Society we all thought dead and buried, along with our money, too confidingly entrusted with them. But, no! news comes from afar—there is some chance of recovery yet—the hard-earned cash may chink in our pockets, and we obtain our promised rights, provided we comply "with the regulations stated in the circular already addressed to the members," *i.e.*, they must pay one guinea for the restitution. A friend of mine had a valuable Newfoundland dog; three several times he disappeared—stolen; three times was he waited upon by persons who promised to restore the animal on payment of a certain amount. Twice he did so withnut grudging; the third time he first applied to the police, and, by their advice, other steps were taken, and the culprit being easily detected, was tried under the new Dog-stealing Act.

Let me, however, ask you one question,—How can I get my due without paying a bribe for it? I am, &c.,

December 13, 1850. Wide Awake.

Mr. Percivall's Letter on the Alleged Lunatic Friend's Society will be published next week.

A Constant Subscriber.—An unqualified practitioner who visits a patient, administers medicines, and charges for the same, is liable to the penalty prescribed by the Apothecaries' Act. He may evade every existing law, however, if he do not send medicines, and if he do not usurp the title of "Doctor" within the limits of the jurisdiction of the College of Physicians of London. Nothing can be worse than the anomalous state of medical law.

When the communication of Dr. Mullar, of Edinburgh, reached us, our Journal, with the exception of this column, was made up for publication.

We have a long list of contributions in type, the appearance of which will, we fear, still be delayed, from the necessity of publishing next week the Index and Title-page of the Volume we shall then complete. Among these are the conclusion of the Paper of Mr. Ancell in our last; Mr Walton's Concluding Lecture; Mr. Livett on Strangulated Hernia; the conclusion of Dr. Hutchinson's Paper on Consumption; Dr. Maund on the Cure of Ganglia; Provincial Hospital Reports; our Foreign and Provincial Correspondence; and several Letters on general subjects.

A Subscriber has doubtless seen, in our Reports of the London Medical Society, many modes of administering vapour. Dr. Snow is the best authority on the subject; and we are quite sure, should our Correspondent require further information, a letter to Dr. Snow will meet with attention.

Fourteen Parts of Dr. Copland's Dictionary have been published.

Communications are acknowledged from Dr. Schœpf-Merei, late Professor of Medicine at the University of Pesth; Mr. Moir, of Musselburgh; Mr. F. W. Pavy, of Guy's Hospital; Mr. Holmes Coote, of St. Bartholomew's Hospital; Professor Fergusson, of King's College; Mr. Godfrey, of Mansfield, Notts.; Mr. Spencer Wells, R.N.; Mr. Campbell, of Roxton; Mr. Hore, of Shoreham; Mr. Bulley, of Reading; Dr. Wilks, of Bethel-place, Camberwell; the Rev. J. Barlow, of the Royal Institution; Dr. McCrystal, of Listowal; A Constant Subscriber; Mr. Brodhurst, of Finsbury-circus; Mr. Pollock, of Grosvenor-street; Dr. Snow-Beck, of Langham-place; Dr. Crawford, of Ratho; Mr. Quekett, of the Royal College of Surgeons; Mr. Gay, of Finsbury-place; Mr. Hawker, of Edward-street, Portman-square; Mr. Stocker, of the London Hospital; Dr. Allison, of Little Alie-street, Goodman's-fields; Mr. Barrett, of Watlington, Oxon; Mr. Smith, of Long-acre; Dr. Little, of Finsbury-square; Dr. Jenner, of Albany-street; Dr. Parker, of Finsbury-square; Dr. Rigby, of Berkeley-square; Secretaries of the Epidemiological Society; Dr. Mair, of Crieff; Dr. Mullar, of Edinburgh.

ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital and to the St. Pancras Royal General Dispensary.

LECTURE XVII.

Concluding Lecture.—Squint—Obstruction of the Nasal Tube. Internal Squint.—One Eye only usually Affected.—Consideration of the Circumstances which make it appear that both are commonly Involved.—Mode of Detecting the Squinting Eye.—Time for Operating, and Advantage of an Early Operation, and Cases Unfit for Operation.—Manner of Operating, and Results.—Obstruction of the Nasal Tube.—Indications of the Stricture.—Cause of the Affection and Treatment.

The operation for squinting, which has for several years been enrolled among the legitimate operations of surgery, is in its results signally successful, surpassing that of any other operation which is practised for the removal of deformity; yet some surgeons attempt to depreciate it, and others to deny its utility. That the voice of the public should scarcely yet be in its favour,—for it has popular disrepute,—is just what might be expected, considering the discredit into which the operation was thrown, shortly after its introduction into practice, ten years ago, in consequence of its indiscriminate application and ineffectual execution.

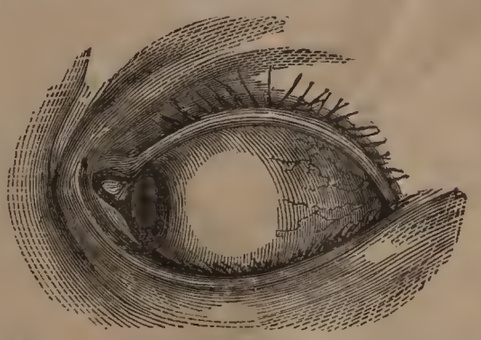
I shall treat of convergent squint only. It is between the fifth and the ninth years of age that the greatest number of squints occur,—just the period at which the diseases of early life usually appear, and to which the affection no doubt is frequently due, although it is sometimes difficult, and often impossible, to discover the remote or predisposing cause, and hence the diversity of sources to which it is so commonly attributed.

Squint may affect one or both of the eyes, but so rarely are the two implicated that the occurrence should be regarded as an exception, yet, without examination, the reverse would seem to be the truth; and this arises from what may be seen in all cases of single squint, an occasional apparent participation of both eyes in the deformity, or of the squint being sometimes completely transferred from the one eye to the other. Now, in the former case, there is often a deceptive appearance which is mistaken for a reality, but there may be sometimes, as there nearly always is in the latter, a perversion of the natural action of the recti muscles of both eyes, although only one eye can be said to squint; that is, the eye which may be called sound—in which there is no individual loss of antagonistic force among its muscles—is actually affected, as I believe, through the influence of the associated movements of the lateral recti muscles, and partakes of the greater amount of volition which is required and given for the play of the muscles of the deformed eye, and the effects of which it exhibits, independently of any loss of balance of power, in its own muscles. If this be correct, it explains why it is that a single operation, the division of an internal rectus muscle of one eye, will restore to parallelism eyes that had been so affected, and accounts also for the common error, that one operation may cure two squinting eyes.

It is seldom, when a patient is brought to me, that I cannot at once detect the squinting eye, but when there is doubt I use this test, which I recommend to you. Place the patient in front of you, and at two or three yards distance, tell him to close one eye and look directly forwards at you with the other, (which will now be in the centre of the orbit) then direct him to open the closed one. Now, if the eye which had not been closed is normal, it will retain its central position, while the other is turned inwards; but, if it be deformed, it will turn in, while the other will then become straight. The experiment should be reversed. The settling of the squint, if I may be allowed to use the expression, is not always instantaneous, and depends on the power that the patient can exercise in the movements of the squinting one; and the less that that power departs from the natural standard, the less quickly is the squint perceptible, requiring, when it is but little impaired, that his attention be diverted, and the volition interrupted by causing him to wink a few times, or to close the eyes for a second or two and then open them for it to be observed. Cases are met with that are scarcely embraced by this test, and in which the greatest nicety is required to detect the faulty eye. It will greatly assist to dispel doubt, if it can be ascertained that one eye turns inwards more than its fellow when the tip or the root of the nose is looked at, or that one cannot be turned out to an extent equal to its fellow, or is deficient in sight, or deviates from the horizontal position, or is retracted. Whenever there is this difficulty in coming to a conclusion, which is indeed rare, it is probable each eye is deformed; yet it would be imprudent to operate on either eye indiscriminately, with the intention of doing the other also; operate on that which you think to be the worse, and see the result, for it has happened to others and to myself to be deceived, even in such cases as these, as to the implication of both eyes—so great can be the influence of a squinting eye on its fellow, through the medium of the associated movements—and a single operation has been all that was required.

When both eyes squint, two operations are imperatively necessary; the internal rectus muscle of each eye must be divided. If a squint has become confirmed, and the patient is in health, and the external rectus muscle of the eye is not paralysed, so that the eye can be voluntarily turned outwards, and there be no contra-indication, I advise an operation even in infancy. By operating early an eye may be saved, for the function of vision is seldom retained in its integrity after a few years of squinting; and where defective vision has been the cause of the squint, the eye is much more likely to be properly righted by an early operation, and before the muscles have been long deranged, than afterwards.

But the inability to abduct the eye may not arise from paralysis of the abducting muscle, but very inordinate action of the internal rectus (which I believe sometimes acquires bulk), and, if this be suspected, it is right to operate on the suspicion; success will sometimes follow. This sketch was



taken from an eye that exhibited greater inversion than any I have ever met with; there was no power of abduction, nor could the eye be pulled outwards; from the prominence of the globe I think it likely that it was not a common case of squinting, arising from defect of the recti muscles, but the sign of some disease within the orbit.

I operate in this way. With the patient seated or lying down, I insert the end of a wire speculum under the upper lid, and transfer the handle of it to an assistant who is standing behind him, or allow the assistant to place it. I depress the lower lid with the third or little finger of my left hand, and with the forceps held in the same hand, I raise a fold of the conjunctiva midway between the cornea and the caruncle and opposite the lower edge of the internal rectus muscle, and with a pair of scissars cut it through, together with the sub-cellular tissue, to an extent just sufficient to admit the hook, and afterwards one of the blades of the scissars. I then introduce the blunt hook, pass it under the muscle (which is made prominent) and divide with a pair of scissars its tendinous expansion along with the conjunctiva that covers it. I think that there is advantage in not cutting through the conjunctiva and the cellular sheath of the globe to a greater extent than is necessary for the division of the muscle; from attention to this I attribute the absence of that very marked prominence of the globe after the operation, that I have often witnessed in the practice of other surgeons, of which I have not had a marked example out of some hundreds of operations. In the majority of cases, the eye has been more or less prominent, but never to an exaggerated degree. Nor has it occurred to me to have any of those distressing instances of eversion, or turning out of the eye; like the prominence of

the globe, eversion to a slight degree has often been a consequence.

If the eye does not at once become straight after the operation, the muscle has not been entirely divided. Only two examples have occurred to me as exceptions to this out of the large number of cases that I have mentioned, and in each of them the eye was straight on the next day. The less that is done to the eye in the way of treatment after the operation, the quicker does it recover from its effects. Sometimes a little fungus growth arises from the granulations at the wound, and it should be cut off, and not attacked with escharotics.

I now enter on the last subject of my course, obstruction of the lachrymal tube, or nasal duct, as it is more commonly called. This obstruction or stricture, begins imperceptibly, and increases insensibly till the indications of a stoppage, a watery eye and a distension of the upper part of the tube by lachrymal secretion, frequently also by some of the products of inflammation which are secreted by the tube, force its existence on the notice, and this state continues for a longer or shorter period, temporary relief being obtained by pressing out the accumulation which escapes into the nose; or, should the stricture be tight, through the puncta. But this is not the end; unless there be timely treatment, abscesses form, and a sort of natural cure is brought about in a fistulous aperture.

The disease is essentially of a strumous origin, and the most characteristic marks of which are manifest in an active degree in nearly every instance, and thus there is the clear indication for local measures to overcome the obstruction, and constitutional treatment to conquer the cause of that local effect. Now, as the constitutional disturbance is so palpable, there is no difficulty in deciding when treatment should be directed to it, as well as the nature of the treatment, but there is often doubt and difference of opinion as to what the surgical treatment to overcome the stricture should be, and when it ought to be adopted. It may be laid down as a general rule, that, when the obstruction becomes annoying from the necessity of emptying the tube by pressure, the time has fully arrived for local treatment. If the symptoms lead me to suspect stricture, I invariably press the sac, and if there escape through the puncta lachrymal secretion with some of the fluid products of inflammation, I conclude that there is obstruction; for unhealthy secretion from the mucous membrane of the tube, as far as I know, always co-exists with stricture, perhaps always precedes it. Then, what is that local treatment to consist in? It must be mechanical. The two methods which are now usually resorted to are, catheterization of the tube through the nasal opening, and the introduction of a style from without; of the two I prefer the latter. The nasal catheter may be useful in determining the absence or existence of a stricture, or it may be in detecting a slightly narrowed tube; but where the obstruction is complete, or nearly so, it would, I think, be a matter of difficulty to overcome it by the catheter at once; force of any kind is inadmissible, for with it the lachrymal bone would be fractured; the peculiar but necessary tortuosity of the instrument, and the delicacy of the lachrymal bone, render it very liable, when there is obstruction above, for the instrument to pass laterally into the nose; and, according to my own experience, patients will not submit to the repeated use of the catheter which would be required to overcome a stricture, and avert the chances of that danger.

The style is rarely objected to, and I think it has the great advantage of its introduction doing less damage to the interior of the tube, whatever may be the state of the stricture, than the catheter. It should be of silver; that for a full grown adult an inch and a quarter long, and the thirteenth of an inch thick; the size should be diminished according to the lesser dimensions of smaller tubes. For its introduction, a puncture should first be made with a narrow knife (the one that I use is little more than the sixteenth of an inch broad) through the skin into the upper and outer tube, a little below and internal to the opening of the inferior punctum in the sac, the point of the style entered, and the body pressed down with moderate force, and, if that will not suffice to overcome the stricture, withdraw the style, pass the knife through the obstruction, and then effect the introduction. Very frequently I carry the knife at once through the stricture, and then introduce the style. The length of time that a style should be worn must depend on the peculiarity of the case, but, generally, I should say that its presence is no longer needed when the secretion from the eye freely passes by it into the nose, and when pressure on the tube cannot force out any vitiated secretion from the lower punctum—I say the lower, because frequently there is inflammation of the upper part or head of the tube, which lingers long after the obstruction has been removed, and a glairy fluid is secreted, which escapes under pressure through the upper punctum.

Some cases of obstructed tube admit only of partial relief; they require the style to be constantly worn; the degeneration has been to an extent that has destroyed the natural character of the tube, insomuch that it will close when not kept open by some body being retained within it.

Gentlemen, my lectures are now ended. I have treated of all the operations that may be strictly called ophthalmic, many of which have been but briefly considered, yet I hope sufficiently so for practical purposes; at all events they serve to show the treatment I adopt, and, in a concise style, offer to you some hints which I hope you will find useful when you come to think and operate for yourselves.

GENERAL CORRESPONDENCE.

DURATION OF HUMAN PREGNANCY.

[To the Editor of the Medical Times.]

Sir,—Upwards of twenty years ago there was published, by Dr Robert Lyall, a small book, entitled "Medical Evidence relative to the Duration of Human Pregnancy, as given in the Gardner Peerage cause before the Committee for Privileges of the House of Lords," the perusal of which at the time interested me much, and certain portions of it provoked a hearty laugh; and I conceive that the following *jeu d'esprit*, copied from the work, may possibly do the same in some of the younger members of the Profession, into whose hands neither the work itself nor the review of it, which appeared in the *Lancet*, may have fallen.

"We see only one speedy and sure method of determining satisfactorily the knotty point in question, and we do not doubt that generations yet unborn will reverence our memory for our ingenuity in devising it. We recommend that a spacious building shall be immediately erected, in a healthy site in the environs of this metropolis, which shall be surrounded by walls at least 100 feet in height; that all aëronauts shall be forbidden from approaching the same edifice upon pain of death; that no males except the *privileged* shall have admission; that it shall be put under the care of a proper number of virtuous matrons selected from nunneries; and that the whole shall be governed by monastic regulations. This superb establishment shall be denominated 'The Experimental Conception Hospital,' in coincidence with its destination. Besides apartments for matrons, offices, &c., this institution shall contain separate rooms for fifty *virgins*, between the age of 14 and 45, and for fifty *unmarried women* who may have borne children, between the age of 15 and 45. The directors of the hospital shall appoint ten of the most distinguished physician-accoucheurs, between the age of 20 and 50, each of whom shall be destined to administer physic and *consolation to a certain number of these females during a single nocturnal visit*. The clerk of the hospital (one of the matrons, of course) shall keep an exact register of all operations; and the results of the experiments shall be freely communicated to the world for the advantage of society, and especially for the purpose of affording our good British Parliament sure data upon which they shall be able to construct precise and just laws with regard to the legitimacy or illegitimacy of all children born in these realms after the year 1830."

I do not consider it requisite that the country should be put to the expense of erecting such a building, nor do I think that the procreative powers of these celebrated physician-accoucheurs should be so far taxed, fearing that the day after these consolatory visits they might not be in the best possible condition for visiting their ordinary patients, when, in process of time, by careful observation and inquiry, the same end can be attained.

About twelve years since, my attention was first drawn to the subject under consideration, in consequence of some of my patients, whom I had been engaged to attend, being mistaken in their calculation, and delivered at a later period than they expected, the issue of such pregnancies being generally males. Fancying that I had met with some remarks bearing on this point in the work alluded to, I again referred to it, and found that a Mr. Cory Hawkes had in his evidence stated, that in his opinion women, like some of the inferior animals, went longer with males than with females; and that he in his practice had arrived at the same conclusion to which

I had at a subsequent period come, viz., that, when the pregnancy had exceeded the time calculated on, a boy was generally the result of such pregnancy. As this is the only remark on the subject in point which I ever read, I pondered it well, determined to test its accuracy forthwith, and to make minute inquiries on this subject of my numerous patients, whenever I durst without committing myself.

About this time, a young married woman, a patient of mine, informed me that, from certain peculiar sensations known to herself, she was satisfied in her own mind that she had conceived on a particular night, which she noted in an almanack; at the end of 260 days labour commenced, and she was safely delivered by me of a girl healthy and full-grown. Shortly after, a young medical man, a late pupil of my own, informed me that he could say with certainty on what particular day he had connexion with a young female, in consequence of which impregnation took place; the labour commenced at the expiration of 260 days, and she was delivered of a full-grown healthy girl. Another young medical man, an intimate acquaintance of mine, who to prevent impregnation had, up to a certain period, used precautionary measures, omitted them on a particular day; on that very occasion, impregnation took place, and she was safely delivered of a fine girl, the labour having commenced at the expiration of 260 days; since which time the same person has been the father of another female child, by a different woman, whom I myself delivered, and at the end of precisely the same length of time. The above cases happened shortly after my commencing the investigation; and now I shall descend to the present year, in which I have attended the wife of a medical man, residing on the Surrey side of the Thames, who, being conscious and perfectly satisfied in his own mind on what particular night impregnation took place, noted it in an almanack the day following; and within three hours after the expiration of 260 days the labour commenced, and she was safely delivered of a full-grown and healthy girl.

Since directing my attention to this particular point, I have known but one exception, viz. . The sister of one of my patients, now residing in Lambeth, and whose chastity I could vouch for, about eight or nine years since, lost her husband, through a paralytic stroke, after a very few days' illness; two or three days after the expiration of nine calendar months from his death, she was delivered of a girl who is still alive but delicate. In this case the pregnancy must have been prolonged by grief and want of food and sleep. No charitable person could give her the credit of forming an improper intimacy with any other person at such a time, she still cherishing her husband's memory and remaining a widow up to the present time.

With respect to the generation and birth of male children, in those cases which have presented themselves in my practice, where I have calculated from a particular coitus, I have not been enabled to arrive at so much precision as in the case of females, having found a variation of three or four days,—that labour usually commences at the expiration of 274 days, or as nearly as possible a fortnight longer than that I lay down for a girl, varying thence to 277 days; but in no one case has it ever reached 280 days, which is the period usually set down in midwifery books, and by some supposed, but erroneously, to be equal to nine calendar months.

The usual computation by calendar months is accurate enough in ordinary cases, a few days either within or beyond that time being of no consequence, but the calculation by weeks and days is more accurate and preferable. At the trial alluded to, some of the most eminent physician-accoucheurs of that time gave it as their professional opinion, that labour commenced at the expiration of nine calendar months. Now, throwing leap-year on one side, there are but two months in the year, viz., July and December, wherein the conception must take place in order that the nine consecutive calendar months, containing 274 days, at the end of which, I maintain, labour, ending in the birth of a male child, usually commences. If a woman conceive in the months of January, February, June, August, September, October, and November, it will be found that the nine consecutive calendar months contain only 273 days; again, if in March and April, then 275 days; and, lastly, if in May, then 276 days.

With regard to extraordinary pregnancies, my professional opinion is, that it is probable, if a lingering illness occur after conception, or a woman from grief, stricture of the œsophagus, scirrhus of either orifice of the stomach, or any other physical cause, take or retain but little food, that the pregnancy may be prolonged a few days; but, again, if my own sister, or any other woman in the kingdom, in good health, wished it to appear that her pregnancy had extended to ten calendar months, or near that time, I, who have now practised midwifery on the Surrey side of the Thames twenty-five years, would not believe her on her oath or death-bed. Such cases may do for the Marines or the House of Lords.

Previous to concluding this short paper, I would advise my professional brethren who may read it not to prejudge what I have advanced, but when they have opportunities to embrace them and test it themselves. I have no object in wishing to mislead or deceive them, and I have adduced nothing but what I believe to be correct. There are many of my late pupils, settled in divers parts of the kingdom, to whom I made known my views on this subject years since, who may in the interim have had opportunities of judging whether what I then imparted to them has in their practice proved to be correct or not.

THOMAS GLASS MELHUISH, M.D.,
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THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

SIR,—Dr. Dudgeon's observations on my letter, which you did me the honour to publish in the *Medical Times*, Dec. 7, remind me of Squire Thornhill's style of argument with Moses in "The Vicar of Wakefield." In that letter I stated that the homœopathic dose, the decillionth of a grain, has a less proportion to a human blood-globule than this blood-globule has to the whole earth; and that this dose could have no effect on the human system. He answers this by bidding me weigh or measure a fit of anger, a smell, a flash of lightning, &c. (he might have added a bag of moonshine, as having more connexion with homœopathy); so that I am forced to say, with poor Moses, "I protest I don't rightly comprehend the force of your reasoning," at the risk of receiving the same answer as he did.

However, though it will puzzle me more to calculate the superficial extent of a piece of information than the superficial extent of Dr. Dudgeon's logic and reasoning powers, yet will I attempt to give him some sort of solution of two or three of his problems.

In the first place, as a man exhales about two ounces of matter in an hour, if we allow that 1-1000th part of this adheres to the surface over which he travels, every square inch of this surface will contain many millions of doses of the decillionth of a grain each.

If Dr. Dudgeon will adopt the usual methods of measuring the exhalation of a flower, he will find it immensely greater than a homœopathic dose; and it does not require a decillion of roses to form one grain of the otto.

The musk and ipecacuanha having puzzled wiser heads than mine or Dr. Dudgeon's, I must give them up, merely remarking, that if a million of the above homœopathic doses should exhale every second from a grain of the substance, millions of years must elapse before the loss would affect our most delicate instruments.

As to the swooning, jaundice, &c., they are the effects of disgust or some other mental emotion, and require for their explanation a knowledge of the nature of the union between mind and matter—which, if Dr. Dudgeon will give, we shall be obliged to him. In the mean time, he can no doubt recollect many other instances of sickness, fainting, hysteria, &c., from mere imagination alone, without any tasting or smelling at all. These circumstances might suggest to the homœopaths the expediency of adding the sale of charms and amulets to their methods of treating diseases—it has proved lucrative in the hands of impostors ere now, and may become so again with skilful management.

In conclusion, I must express my doubts that the odour of the decillionth of a grain of musk, ipecacuanha, camomile, &c., acts more intensely than that of a pound; that, by "biting my thumb" at my choleric neighbour, I shall disturb his biliary system more than by pulling his nose; or that the poor wife's grief would have been very much greater if she had only heard of the death of a second cousin, or (which is truly a homœopathic dose) of the man in the moon.

I am, &c., H. BARRETT.

Watlington, Oxon.

[To the Editor of the Medical Times.]

SIR,—As the subject of homœopathy appears growing tiresome to you, I will only once more ask leave to occupy your columns in order to acquaint Dr. Dudgeon that I agree with your editorial remarks as to the still indefinite meaning of the Hahnemannist motto.

Dr. Dudgeon, in answer to a question of mine, as to the true signification of the words "similia similibus curantur," very candidly says, "that they merely serve as a distinguishing motto" or formula, and that "the phrase leaves something unexplained, just as the mathematician makes use of a letter to denote some unknown quality." I say this is a candid admission, for truly the word *like* has been almost as variously used as the algebraical *x*, and its application has been co-extensive with that symbol.

Certainly such a law will hold good, as every one can satisfy himself by turning to any homœopathic work, wherever the word "like" is apparent; and whatever may be included in it can be only of secondary importance. Dr. Dudgeon, however, cannot, any more than myself, believe that any practical results can come from such a general formula, and therefore he says we had better restrict the definition of the motto to that laid down by Hahnemann himself. This authority says, we cure a disease by a remedy which can in itself produce an affection similar to that sought to be cured; at the same time taking care, says Dr. Dudgeon, that by "similarity we do not mean identity," or "refer it to the producing agent, morbific or medicinal, but to the effect produced." Wishing, then, to be a true Hahnemannist, I take from my shelves the various homœopathic works now before the world, in order to erase from their pages those parts where the law is not thus strictly defined, and I find there is not one that can escape some obliteration; some books, indeed, I find, would have little left but their covers. For instance, Mr. Sampson, whose work is very extensively read, applies the formula in every imaginable way. Take, for example, the following illustration in proof that that gentleman is quite ignorant of the system he professes to understand. He mentions, as instances of the homœopathic law, certain cases of Dr. Elliotson's, where *fatty discharge* from the intestines was cured by the administration of *olive oil*. This is said in spite of Hahnemann, who declares, that "likeness" has no reference to the producing agent. The examples in this book, indeed, have so little reference to any definite law, that I rather suspect it is intended as a very clever parody on the system. I will not mention other authors less known, but refer to Dr. Epps, who was one of the earliest introducers of this system into England, and has always been considered as one of its leading champions. To prove the doctrine of Hahnemann, that cures are effected by the production of symptoms similar to those already existing in the system, Dr. Epps brings forward many examples. He says, snow is good for a frozen nose, because this latter condition is produced by snow. The likeness here refers to the remedy, unless the Doctor can show that friction with snow upon a healthy surface is productive of cold. He next says, "cholera, where there is excessive coldness, is cured by cold water." Here, again, the "likeness" has reference to the remedy, for the effect of the cold sheet, Dr. Epps must well know, is not the production of cold, but of heat. I might quote many other instances to show that one of the leading homœopaths has yet to learn the doctrine of his master; but I cannot refrain from mentioning another example of Dr. Epps', from the same page, as illustrative of how the formula may be filled up by any words which resemble one another. He says the homœopathic doctrine has scriptural authority for it, and quotes the apostolic injunction, "Rejoice with those who rejoice." One cannot but smile at the very novel meaning which is thus conveyed to us—that we are ordered to rejoice with those who rejoice, in order to counteract all rejoicing.

Dr. Dudgeon says again, By symptoms being similar, we do not mean identical. I may here also state, that such distinction is never attended to by homœopathic writers. How does Dr. Epps show that the cold, which he says is useful in cholera, differs from the cold already existing? or how, in his scriptural illustration of "weep with those who weep, and rejoice with those who rejoice," does he distinguish the various kinds of laughing and crying? I need, however, have mentioned only one example, which is used by all writers, and this is, that sickness produced by an indigestible meal is cured by an emetic. How, I ask, does this artificial sickness differ from the original?

Another point, as to the meaning of this motto, is left untouched by Dr. Dudgeon. Is it meant, when a medicine is given in order to produce symptoms similar to those already existing, that such induced symptoms are cognizable to a bystander or not? That either will satisfy those who regard the like as an "unknown quantity," I am well aware; but to the true Hahnemannist, as Dr. Dudgeon, there must appear in this an incongruity. If a man take an indigestible meal, and have sickness or diarrhœa in consequence, we are shown the good effects of the medicine by the increase of these symptoms. Are we, then, in like manner to understand, that after the administration of remedies we ought to expect the symptoms of pneumonia or rheumatism to increase, or the mortal sickness produced by a scirrhous pylorus to be even further extended before alleviated? If the homœopath says he cures a pneumonia or pleurisy by the production of symptoms not appreciable, ought he not in like manner to cure a sickness without any further increase of that morbid state? Dr. Epps says, ipecacuanha cures vomiting, because it produces vomiting in health; also, this same drug cures asthma, because it produces asthmatic symptoms in health. Does he, by the word "cure," mean, the original symptoms are increased or alleviated? In the first instance, evidently the *former* is intended; in the second instance, the *latter*. Thus are two dissimilar cases made to illustrate the same law. What can this be called but sophistry?

I would not have occupied your columns by such a lengthy communication, but that, intending it to be my final one, I wished to show to Dr. Dudgeon how, by following his interpretation of the homœopathic doctrine, a number of standard works on the subject are of necessity converted into waste paper.

Allow me to add, that I think it would not have troubled Dr. Dudgeon very much if he had given a brief answer to my other question, which was as follows: As the homœopathic doctrine was originally founded, and is now supported in part, by common practice, in which ordinary doses of medicine are given, what quantities, I asked, are given by the homœopaths in those cases? I cannot but think that it is a fair question—since, as Mr. Wilson said, in a late number of your journal, all allopathic cures have been effected on the homœopathic theory; and the treatment consequently agreed on by both parties, and the ordinary doses being admitted as curative by both—whether the infinitesimal doses will answer equally well. For example, take ague, which Hahnemann himself said is cured by bark in the ordinary doses. What I want to know is, Is a fractional part of a grain equally efficacious?

I am, &c., SAMUEL WILKS, M.D., London.

1, Bethel-place, Camberwell.

DIPHTHERITIS.

[To the Editor of the Medical Times.]

SIR,—I have just seen an excellent paper in the *Medical Times*, which was read by Dr. Bennett at a late meeting of the Medical Society of London, on diphtheritis, in which it appears his object was to call forth the opinions of those surgeons who have seen most of the disease. I have had the misfortune to see a great deal of it during last autumn and winter in this town (Haverfordwest), where it broke out as an epidemic, and continued till the spring of 1850, and must have met during its reign with at least 200 cases,—40 of which were fatal.

Its approach was often insidious, commencing generally with slight huskiness of voice, loss of spirits and appetite, but seldom or never any pain in swallowing. In this early stage, and often not at all during its whole course, parents would often wonder at the idea of there being anything at all dangerous the matter with their children, when, perhaps, at the same time, the pharynx was perfectly coated over with false membrane, and the tonsils alarmingly swollen. In another hour or two all hope would be over from extension of the disease to the larynx and air-passages. In the severest cases the attacks were often suddenly alarming, commencing with vomiting and shivering, loss of appetite, and general disturbance, without any throat affection as yet, which perhaps would not appear for four or five days; the stomach having evidently shown symptoms of the disease from the first. In all those cases the larynx was always simultaneously affected with the pharynx, the croupy symptoms being severe. Such cases were invariably fatal.

In its course it was very uncertain. Some of the little sufferers appeared to get through it easily, others lingering for weeks with slight but still deceitful symptoms. The child would play about with every evidence of perfect health, and enjoy the little sports of childhood as usual, when all at once the breathing would become croupy, the respiration laborious: the larynx is attacked! The chances are now fearfully against him. No treatment seems to check it. Time is short, as every minute exhausts life. I have seen them die in four hours from such sudden invasions; they may linger four or six days, with deceitful intermissions of sometimes eight or twelve hours' duration. The croupy symptoms would suddenly cease; the little sufferer would sit up, smile, eat, drink, amuse itself; the delighted parents would point to him with admiration of your skill; the sonorous breathing, which to you told too plainly, at your last visit, that death was there, has disappeared; and, off your guard, you join in the general joy, and stamp it by pronouncing him safe. Mark! such sudden changes are never to last—it is sure to return. When recovery is to take place, the changes are slow, hesitating, and doubtful for hours and days. Perhaps not more than four hours have passed—you are sent for—the frightful symptoms have returned—generally at night—all now is over—the case is nearly hopeless.

Treatment.—General and Local.—Local treatment is the sheet-anchor. The only one I found of use was a strong solution of nitrate of silver, never less than ℈i to ℈i, sometimes ℈ij., applied liberally three times a day, or oftener in very severe cases, to the tonsils and affected parts, with a piece of sponge fastened to a quill. I tried the pure caustic, but it enabled me to touch a few parts only of the affected tissues at a time, and those often too

severely; I used, in their turn, several local stimulants, but found none to answer so well as the solution of nitrate of silver.

Blisters and leeches were useless, often worse than useless; they exhausted and hastened death in every case. I found ext. belladonnæ and ung. hydrarg. fort., in equal proportions, of apparent use in relaxing the spasm of the laryngeal muscles, when laid thickly on the windpipe. It was only a palliative—never saved life.

General Treatment.—I depended on calomel, in combination with ipecacuanha, in doses varying from ½ gr. each, every four or eight hours. In simple, uncomplicated attacks, I never lost a single case, nor ever allowed it to gain ground. If called before the windpipe was attacked, I never hesitated to say that a cure was certain, such confidence had I in my remedies, provided the system did not suffer from a primary attack on the stomach. I know of no disease of such magnitude more manageable.

I never lost a case, however severe, where I had established ptyalism. In three severe cases—a man of 40, a boy of 12, and a girl of 12—the croupy symptoms gave way, the false membranes, instead of maintaining their dangerous, blankety, continuous appearance, became patchy, and dissolved away like melting snow. The moment ptyalism was established, and not till then, I gave wine, and decoct. senegæ, and ammonia, and iodide of potassium at the same time. Emetics I found of great use in the first stages; they always relieved the distress in breathing, and carried away large quantities of mucus; in the last stages they only exhausted, and often would not act at all. The inhalation of vinegar vapour, and the vapour of hyd. c. cretâ, I have thought useful in desperate cases. They seemed to prolong life in all cases, but never saved it.

I would in every case most unhesitatingly trust to the topical application of nitrate of silver in solution, and the internal administration of mercury, paying due attention to the powers of the system, supporting it with wine, quinine, and ammonia when required, taking great care not to debilitate nor exhaust by bleeding, warm baths, &c., &c.

I can venture to assert that the above treatment, if commenced at any period of the disease before the larynx becomes implicated, will succeed. The only cases I lost were those where the larynx and pharynx were simultaneously affected, the disease having commenced primarily in the stomach two or three days before, as evinced by vomiting, rigor, and general indisposition, and those where the laryngeal implication had shown itself before aid was sought. I had the benefit of a *post-mortem* examination in two cases: the pharynx, tonsils, larynx, trachea, and bronchial tubes were more or less coated with false membrane, the larynx and trachea were thickly coated, the stomach showed symptoms of great irritation also. I am, &c.,

Haverfordwest. J. D. Brown.

CHOLERA AT MALTA.

[To the Editor of the Medical Times.]

Sir,—Some of the particulars of the disease from which our fleet has recently suffered in the Mediterranean, may not be uninteresting, as tending to elucidate the extraordinary partiality which Asiatic cholera sometimes exhibits in its mode of attack.

The letter I quote from has been lately received, and is from one of the medical officers of the Queen, 120, flag-ship on that station.

The writer says:—"Our first cases occurred June 19th. We put to sea with the squadron, July the 3rd, from Malta. The disease continued until the 13th. Our loss amounted to 17 men. Quite free from the disease, we continued cruising between Sicily and Malta, a good deal of diarrhœa prevailing, as is usual. We received orders to enter Malta harbour August 14th; remained until the 16th, when we put to sea,—cholera again making its appearance on the 19th and 21st, only two cases occurring,—both fatal, however. The squadron now took a further range towards Sardinia, and, again returning, entered Malta harbour, two ships at a time going in. The Queen and Hogue entered the harbour together September 4th. We were employed provisioning and completing water until the 8th, when we left Malta. On the morning of our departure, and when at sea, the cholera again, and for the third time, broke out amongst us with increased virulence, having lost thirty-one men between the 8th and 19th.

"Our mortality, from the commencement to the cessation of the disease, has been 59½ per cent.; yet it is a curious fact, that the Hogue quite escaped, although anchored and situated in every respect similar to the Queen. During our stay in harbour, there was some meteorological change to aggravate the disease; the weather was cloudy, heavy rain fell, and there were occasional squalls. The disease increased also in the island about the same time. Was it not strange that the Hogue should have escaped, while the whole stress of the disease appeared to have invaded us? I suppose it is with ships as with individuals, some being more susceptible of the poison than others,—just as we observe in some localities during epidemics. What is your idea of the period of incubation? As to the treatment, it appears to be of no avail, no matter which kind you adopt. The calomel one is that to which I rather incline. We tried it in the way you recommended (small doses every quarter of an hour), and found it very beneficial in some cases, giving, at the same time, small quantities of brandy and water to wash down the powders. Calomel and opium is the treatment we ought to feel the greatest inclination to adopt; for it is well known that in India, where the disease is so often met with, that treatment has never been relinquished. On theoretical grounds, the saline treatment is admirable; but, although so much according with reason, look at its results. There are some cases, and it matters little what treatment you adopt; some take in the poison with such intensity and malignancy, that the disease becomes perfectly incurable.

"As to the mode of attack, we have had several cases where individuals were struck down at once, without any premonitory diarrhœa; the first symptoms being giddiness, general weakness, and cramp,—and there was no mistaking the countenance; lastly, our most rapidly fatal cases were those in which there was but little vomiting and purging.

"As you can easily imagine, we have been pretty well harassed. I hope it may never fall to my lot again to witness such a terrible scourge. And, after all this dreadful experience, what have we gained? The mortality has been fearful; yet one would not mourn it so much, if we derived any information from it to guide us in future invasions."

The most remarkable circumstance in the history of the cholera, as it appeared at Malta, was its having attacked one ship with so much violence, and yet that another should have entirely escaped.

Perhaps some of your numerous readers may be able to account for so extraordinary a circumstance. I am, Sir, &c. J. D. C.

Portsmouth.

SYMPTOMS RESEMBLING SYPHILIS PRODUCED BY MERCURY.

[To the Editor of the Medical Times.]

Sir,—It is a growing opinion in this metropolis, that mercury very frequently gives rise to symptoms resembling syphilis. This is an opinion not only expressed by many who, from circumstances, have been enabled to form a judgment on the subject, but it is also becoming rife in the public mind. It is a question so important in practice—as important to the Profession as to the public—that I take the liberty of addressing you on the subject. And I should state that I do so more particularly in consequence of a case that is to be read in the *Lancet* of Nov. 16, p. 549. This case, headed "Sloughing Venereal Sore; no Secondary Symptoms; Periostitis Four Years afterwards. Ten Years Later, Gonorrhœa, followed after Five Years by Leproid Eruption." To state the case in a few words, a gentleman eighteen years of age contracted a venereal sore, which sore took on a sloughing character. It healed without mercury, nor did secondary symptoms arise. Four years later, however, the periosteum of the nose was affected and the septum perforated; at the same time, the bones of the fore-arm were inflamed. "For these affections he took mercury about six weeks, and was salivated repeatedly; but each time the mercury was given up, the pains in the elbows returned. He then changed his residence, and went through a course of mercury which was prolonged for thirteen weeks. At the end of this time the periostitis was cured, and he has since had no return."

In 1840, or ten years later, the patient had a urethral discharge, which was arrested in four days by the use of copaiba.

In 1845, he first observed an eruption on the skin; it was papular, and confined to the extremities. For this he took mercury to salivation, iodide of potassium, &c.; but the skin disease did not yield to this treatment; but, in the fourth year of its existence, it was rather worse than better. The author concludes the recital of this case with the question, "Is this a syphilitic or a mercurial disease? I am inclined to think it mercurial."

One very important point, Sir, in this case has been omitted, namely, the nature of the primary sore. This is stated to be a sloughing sore; and afterwards, in his summing up, the author calls it "a phagedænic sore." Now, a sloughing sore is not a direct primitive sore; and a phagedænic ulcer does not usually confine itself to "the destruction of a part of the frænum." It will be observed, that the patient had already lost a portion of his nose

before he had touched mercury; that this affection yielded to mercury, but that, fifteen years later, having a papular eruption of the skin, Mr. Erasmus Wilson doubts whether this be indeed a further symptom of syphilis, or produced by the internal exhibition of mercury.

In all probability this sore was, in the commencement, a Hunterian chancre, which, as is so frequently the case *when not treated by mercury*, was destroyed by a sloughing action. But unfortunately, the syphilitic virus is not destroyed by the sloughing process; this, perhaps, commencing after the ulcerative process has passed away—when cicatrization is complete—in consequence of the interstitial compression produced by the remains of the ulcer. But, whether a Hunterian chancre or not, it was a venereal sore, which was healed without the exhibition of mercury, and without cauterization; consequently secondary symptoms must be expected (though not essential), and they appeared after the lapse of four years. It is a well ascertained fact, that secondary and tertiary symptoms are by no means constant in their course, but that at one time one organ is affected, at another time another; therefore, that the skin was affected fifteen years after the bones, in no degree militates against the syphilitic nature of the attack, nor indeed would it, had the eruption appeared sixty years after the primary affection, or had the patient taken for the periosteal disease sufficient mercury utterly to destroy his constitution. Mercury does not cleanse the system of syphilis, for no known therapeutical agent is competent to perform this; it is only qualified to rebuff symptoms as they appear. It is, however, quite a novel idea, that mercury shall give rise to eruptions simulating the syphilitic; nor do I think, Mr. Editor, that it would have been necessary to wait until to-day to gain the knowledge of such a fact, now in the decline of the mercurial era, when those of the last century and the beginning of the present did not think it necessary to enlighten us on this point.

And thus, Sir, I beg to record my very humble opinion, that mercury never, in any degree, assimilates in its products the features of disease which are characteristic of syphilis, though it may increase to an indefinite extent the results of syphilis no longer syphilitic. I am, &c.

Finsbury-circus. BERNARD BRODHURST.

VALVULAR DISEASE OF THE HEART.

[To the Editor of the Medical Times.]

SIR,—In the report of the "Medical Society of London," given in a late number of the *Medical Times*, there is a very interesting discussion on a paper read by Dr. R. H. Semple, on Valvular Disease of the Heart. Dr. Semple states in his paper, that, "however important might be the diseases of the valves, and however valuable might be the information derived from the stethoscope, yet that these diseases were not so rapidly and invariably fatal as they were generally supposed to be, and that it might be a question whether too much stress was not laid at present upon the stethoscopic indications in forming a prognosis."

To these opinions, having had considerable experience in heart diseases, in which I have taken great interest, I can subscribe my testimony. On first becoming practically acquainted with diseases of the heart, I had the impression, like many others, that all cardiac affections, and valvular disease in particular, were imminently dangerous, and that *sudden* death must, sooner or later, be the result. I had soon reason to find, however, that my prognosis, however cautious and guarded, need not necessarily be a hopeless one. In short, I became convinced that, to use the words of Dr. Semple, "very extensive disease of the cardiac valves *might* exist without seriously impairing the health, or greatly abridging the usual term of human existence,"—in fact, that life is not necessarily compromised by heart disease.

No doubt very much depends on the temper and excitability of the patient, on his habits and modes of exercise, and the nature of his occupation. Very sure I am, that no precise judgment can be formed of the comparative danger of heart disease, merely by an abstract consideration, either of the exact situation or character and intensity of organic murmurs.

About six years ago, a frame-work-knitter, aged 50, of strong muscular appearance, but of rather intemperate habits, applied to me, complaining of some slight symptoms of indigestion, and of occasional palpitation. On applying the stethoscope, I could just distinguish the slightest appreciable murmur, coincident with the systole of the heart, immediately over the situation of the mitral valves, and in the direction of the apex of the heart. He had no shortness of breath, nor any other indication of pulmonary congestion. There were no physical signs of hypertrophy or dilatation of any of the cardiac cavities. His pulse was regular and natural, and he followed his daily employment without inconvenience. A few days afterwards he went immediately from his dinner to his workshop, and was found dead shortly after at his stocking-frame, where he had been observed only a few minutes before, laughing and joking with some children. I much regret that in this case a *post-mortem* examination was not permitted.

Two years ago I accompanied a gentleman, with precisely the same amount of general and physical symptoms, to consult Dr. C. J. B. Williams, of London, who positively asserted that there was little to fear, and decidedly no present danger; and certainly he has continued ever since without any cognizable increase of disease.

The first case confirms the observation of Mr. Richardson, that "persons suffering from valvular disease of the heart, generally died after taking food."

About ten years since, I was called in consultation to a female, aged 20, who had had an attack of acute rheumatism. She was then suffering from the effects of rheumatic pericarditis and endocarditis, which had, unfortunately, been overlooked. There was great distress and anxiety of countenance, violent palpitation, a quick, strong pulse, and jogging impulse of the heart. The attrition sounds had ceased, and adhesion between the heart and pericardium had taken place. Leeches and blisters were applied to the præcordial region, and slight salivation was induced and kept up, with the view of arresting inflammation, and checking further deposit. She recovered sufficiently to be able to earn a livelihood by lace-running, (she had previously been in farmer's service), and soon afterwards married. I had several opportunities of seeing her subsequently, and, though she became thin and pallid, and complained of shortness of breath and palpitation on any active exertion, or sudden surprise, she was able to pursue her employment, to suckle and nurse her children, of which she had afterwards several, and to attend to her other family duties.

In my subsequent examinations, I discovered the physical indications of hypertrophy of the left ventricle, and free mitral regurgitation. She died dropsical, about two years ago, after a *lingering* illness; but, as she was then removed from my observation, I had no means of ascertaining the pathological appearances. I think this case confirms the view of Dr. Golding Bird, that "mitral regurgitation frequently acts as a sort of safety valve in more general disease of the heart."

I attended an old gentleman, some short time ago, who was in his 81st year, but who, to my knowledge, had been the subject of valvular disease of the heart for several years. He had been, nevertheless, hale and strong till within a few months of his death, and capable of taking a considerable amount of active exercise every day. His complexion was florid, and his breathing but little embarrassed, though his pulse was generally intermittent, unequal, and irregular. On the morning of the day on which I was called in to see him, he had walked a distance of six miles along a very hilly road, but whilst ascending the last hill, he was seized with a severe fit of angina pectoris, and had some difficulty in reaching home. This attack seems to have brought matters to a crisis, for he became the subject of gradually increasing dyspnœa and general anasarca; but he declined so slowly, that at his age one might have supposed it a natural decay of nature, had we not been aware of the organic changes which had long been going on in the heart. Very distinct systolic and diastolic murmurs, direct and regurgitant, were heard, referrible to the aortic and mitral orifices.

On *post-mortem* examination the aortic and mitral valves were found ossified and patulous. I am, &c.

Liverpool. T. E. RAWSON, M.D.

IRREGULAR MATURATION OF VACCINE VESICLE.

[To the Editor of the Medical Times.]

SIR,—I have from time to time noticed the remarks in your journal relating to the irregular progress of vaccine vesicles, yet should not have troubled you with this but for the letter of Mr. Rupert Pincott, in which he says, that a patient in whom the vaccine disease was deferred was suffering "malaise" in consequence of dentition. Having to vaccinate several hundreds every year, I have repeatedly noticed instances of irregularity in the appearance and maturation of the vesicle, and, in most cases, have had no difficulty in tracing what I have been led to consider the cause of such irregularity, namely, febrile excitement accompanying dentition, catarrh, diarrhœa, or other affections. It would appear that I have been in error, or so much would not have been written upon the subject; I shall, however, remain satisfied, and let those who choose look for a more occult cause. I may add, that I have repeatedly vaccinated from deferred vesicles, and

have not by any means *invariably* found the result different from that from vesicles of regular progress. I am, &c.,

Mansfield, Notts. THOMAS GODFREY.

OXIDES OF IRON.

[To the Editor of the Medical Times.]

SIR,—Your journal of November 23, contains a statement of Dr. Golding Bird, that he prescribes the brown sesquioxide of iron in preference to the red, having found the latter "utterly valueless." This opinion, coming from so high an authority, is of great importance to many who are in the habit of prescribing this (when well prepared) useful remedy, and I cannot help thinking, that the manufacturers, in their anxiety to produce a pretty-looking article, expose it too long to the influence of the oxygen of the air, and thus convert the active protosalt of iron into the inactive persalt. I am in the habit of using this drug to a considerable extent, and have often prepared it according to the formula of the Pharmacopœia, but have always found the salt of a *brown* colour, instead of a deep red, and which colour, *perhaps*, may be owing to adulteration, or the agency of pure oxygen. I hope that, as Dr. Golding Bird has drawn attention to this preparation, chemical manufacturers may be induced to sacrifice colour to utility; and I am sure that I, in common with many other surgeons, would thank them if they would cast the nitrate of silver in smaller cylinders, as their present dimensions are preposterous, and it is impossible to insert them into the caustic case without breaking the instrument or blackening one's fingers, by scraping it to the required size. I am, &c.

Exmouth. T. M. WARD.

RE-SECTION OF THE HEAD OF THE FEMUR.

[To the Editor of the Medical Times.]

SIR,—In your last number, containing a report of the proceedings of the Medical Society, I am represented as having stated (page 663) that in one of Mr. Haynes Walton's cases of re-section of the head of the femur, death ensued from *hæmorrhage* as a *consequence* of the *operation*, whereas it was occasioned by the loss of blood subsequent to and remote from the seat of the operation. The insertion of this explanation will oblige yours, &c.

Nottingham-terrace, Regent's-park. WM. OLIVER CHALK.

[To the Editor of the Medical Times.]

SIR,—Will you have the kindness to insert the following communication, which was forwarded to me by my friend Mr. Morris, of Spalding. It contains the account of the present condition of the patient upon whom he performed the operation of excision of the head of the femur, and was read by me to the Fellows of the London Medical Society, on the occasion at which this subject was discussed there. As your reporter made no reference to it, Mr. Morris is anxious to have it inserted at length in your journal, and has requested me to transmit it to you forthwith.—I am, &c.

13, Caroline-street, Bedford-square. HENRY SMITH.

The subject of the above case, George Hughes, aged 18 years, after having suffered during six years from disease of the hip-joint, submitted, on the 12th of November, 1849, to the operation for the removal of the carious head of the thigh-bone, which was found still within the acetabulum; the latter cavity was free from disease. He progressed after the operation remarkably well, and by the end of January, 1850, the wound was completely healed, and has continued to improve ever since. The particulars of the case were given in the *Medical Times*, Vol. XXI., p. 35.

Nov. 13, 1850.—*Present State of the Limb.*—When he stands upright, it is exactly 3½ inches shorter than the sound leg; he can walk the length of the street in which he resides, without stick or crutch, upon the toes of the shortened limb; he, however, generally makes use of one crutch; he has perfect motion of the thigh at the hip in all directions, and can kick forwards with a considerable degree of force. The end of the femur presses firmly upon the acetabulum when he stands upright. When the knee is flexed upon the abdomen, the end of the thigh-bone is made to project backwards forcibly upon the integuments, and can be readily felt. The cicatrix is firm and healthy in appearance; that portion of it which covers the end of the femur is adherent to it, and draws the integument inwards, forming a cavity or hollow. He never suffers from any pain whatever. He looks remarkably well, and has gained a great deal of flesh. He regularly works at his business, which is that of a tailor, and sits many hours during the day. The thigh is not at all wasted.

Spalding. E. MORRIS, F.R.C.S.

PURPURA.

[To the Editor of the Medical Times.]

SIR,—In the Register of the causes of death for the week ending Oct. 12th, 1850, four cases are inserted of purpura; one of these occurred in my own practice, and, having met with three other examples within the last five months, I thought a sketch of them, however imperfect, might be worthy of a place in the *Medical Times*, not as illustrating the nature of the complaint, but as showing the circumstances under which it may be met with, and the fallacy of records of the cause of death where the recorder is guided by the order of sequence, and not by the relative importance of the diseases.

I commence with the most recent case, as possessing the greatest share of interest.

Case 1.—Miss F., aged eleven years, residing in a healthy house in Islington, was put under my care, Oct. 7, 1850, for occasional bleeding into the mouth. It had occurred to a small extent for two or three nights on awaking from sleep, she having found her mouth partially filled with blood. In other respects she seemed perfectly well, had just returned from the sea-side, where she had exercise in the open air, and had been capable of great fatigue, having taken *very long walks* with an elder brother.

On my looking into her mouth, she at once directed me to the point from whence the hæmorrhage proceeded,—the upper right canine tooth, which was so loose that I removed it without any difficulty with my fingers, and underneath which the permanent tooth was apparent. While writing a prescription for a simple tonic, the nurse informed me there were "bruises" about the body, which had been apparent for ten days or a fortnight, and which she could not account for. On inspection, large vibices presented themselves on both arms, on the right thigh, and on both legs below the knee, the largest being about two inches long and one broad.

Fearing, from these appearances, a continuance of the hæmorrhage, I touched the surface of the gum, from whence there was a little oozing of blood, with the solid nitrate of silver, and directed the application of a saturated solution of alum should the bleeding continue.

At 5 a.m., on the 8th, I was called to see my patient, the bleeding not having been arrested. When I arrived, no evidences of exhaustion from loss of blood were present; the child was cheerful, the lips red, the pulse regular, 84. A mild purgative was given, and some gun-cotton, steeped in collodion, placed over the gum, and retained by a piece of cork, on which the patient bit.

I saw her again in the afternoon, and the escape of blood, though it had not ceased, had been most inconsiderable. The bowels had acted, and she appeared cheerful, though somewhat exhausted from want of sleep, the night previous having been a restless one.

At one a.m. of the 9th I was again summoned. It appeared she had slept quietly four hours, and had then woke up in great alarm, crying, complaining of violent pain in her head, and begging her mother to send for me. When I came, she had again fallen asleep, and seemed in the enjoyment of natural repose. The pulse was regular, 72; there was now and then a slight movement of the hand to the head, but no stertorous breathing nor starting; the head was not hot, and an equable temperature was perceptible over the surface of the chest and abdomen, with slight perspiration. The oozing of blood still continued from the gum to a very slight extent.

Unwilling to disturb her, I waited a few minutes in an adjoining room, when they informed me she was awake. I then found her in a state of complete insensibility, the pupil of the right eye widely dilated, and totally uninfluenced by the light of the candle, held close; the left pupil of its ordinary size, and still obedient to the stimulus of light. The pulse was natural. There was an attempt to vomit at intervals, and an occasional approach to convulsive action of both the hands in the sudden clenching of the fingers. The respiration was slow and laboured.

This state of things continued an hour and a half, when the pulse suddenly became rapid, the heart's action irregular, the breathing interrupted, and at half past three she expired, the grave symptoms having been present only four hours.

Post-mortem Twelve Hours after Death.—The head was the only part allowed to be examined. The calvarium of ordinary thickness; the dura mater and meninges healthy. On removing the dura mater, the right hemisphere appears larger than the left, and when pressed yields a sense of fluctuation. On cutting into this side, a large clot of blood, very loosely coagulated, is found in the brain, above and apparently extending into the lateral ventricle, the cerebral substance around the effusion being of a cream-like consistence, and pale yellow tint. The remainder of the organ very firm and healthy.

This case appeared to me worthy of record,—1st. As an example of true sanguineous apoplexy at an uncommonly early age; 2ndly. From the total absence of any cerebral symptoms previous to the attack, the child being exceedingly intelligent and lively; 3rdly. From the rapidly fatal issue of the seizure, which only lasted four hours; and, 4thly. From the obscurity of the cause of the purpura, the most natural way of accounting for which appears to me to be to attribute it to over fatigue from long walks in the country. I find since, that there have been some evidences of hæmorrhagic diathesis in the family. The father was some years since attacked with severe hæmoptysis, as a symptom of pulmonary apoplexy; and, after having had a tooth extracted when a young man, bleeding continual for two days. The grandfather has, moreover, been the subject of severe and unmanageable epistaxis.

Case 2.—Walter Phelps, aged 15 months, living at a mews over a stable, and sleeping in an inner room without window or chimney, was brought to me in June, 1850, for emaciation and enlarged abdomen.

It appeared, from the mother's statement, the infant had been quite well until February, when it was attacked with low remittent fever, and from that time had gradually declined.

June 27.—The child is much emaciated, and the countenance has a very pale and slightly jaundiced tint. The tongue is clean and pale, the bowels slightly relaxed, *though generally confined* since first attack. The abdomen tense, and a large tumour distinguishable on the left side extending down to the iliac region, which, though corresponding in site with an enlarged spleen, wants the defined edge observable in enlargements of that organ. There is also some œdema of the right foot. Heart's action natural; pulse 144. He was ordered hyd. c. cretâ, gr. iss. alt. noct., and the cod's-liver oil twice a day.

July 1st.—The child much the same, but a greater degree of general debility. The mercury was left off, and steel given in conjunction with the oil.

July 6th.—Purpura apparent on legs and feet, consisting chiefly of round distinct spots, here and there coalescing. Ordered the following mixture:—

℞ Acid. nitric. dil., ℥xxx.; acid. hydrochloric., ℥x.; tinct. aurant., ʒij.; aqua, ℥iij. M. ft. mist. Cujus coch. minim. duo ter die capiend.

The diet, which from the first has been generous, to be continued with acid fruits. The oil to be discontinued.

July 15.—Child appears better. Purpurous spots over abdomen and back, those on the extremities disappearing; bowels confined, acting only once a day; the motions green and slimy. Pulse 132.

The child's condition continued much the same until the 26th, when collapse supervened, and he died on the 27th, in a state of extreme exhaustion, being convulsed during the last twenty-four hours. The bowels remained confined to the last.

Post-mortem Thirty-six Hours after Death.—Body extremely emaciated; arms, legs, and feet œdematous. Purpurous spots visible over arms, chest, and neck; lips covered with sordes; eyes extremely sunken; abdomen prominent; and a large tumour to be felt, chiefly on the left side.

Thorax.—A few grey tubercles scattered over right lung; the remaining viscera healthy; heart unusually small.

Abdomen.—Liver large and very dark; gall-bladder full of dark bile; the mesenteric glands (with the exception of a few in upper part of the mesentery, which were simply enlarged) presenting a tuberculous mass made up of a congeries of deposits, varying in size from a pea to a nutmeg, the whole constituting the tumour felt during life.

If obscurity prevailed as to the cause of purpura in the first case, the residence of this poor child easily explained both the deposit of tubercle and the disorganization of the blood; in this case the main point of interest being the constipation of the bowels, which I never met with in similar examples of tabes mesenterica.

Case 3.—William M., aged 17 months, living at Maria-street, Kingsland, was brought to me on the 24th of August for swelling of the scrotum. On exposure, this part was found much enlarged and of a dark purple colour, there being also considerable hardness, the whole resembling somewhat a large, ripe magnum-bonum or Orleans plum. The swelling extends along the spermatic cord on the right side, and is also perceptible posteriorly towards the perineum. There are also spots of purpura scattered both on the arms and legs; some large and irregular, like ecchymoses; some small, round, and well defined. The tongue is clean and pale, bowels relaxed, urine clear, heart's action natural, pulse 144. The mother stated the child had had spots about him for two months, but that the swelling of the scrotum had occurred within the few last days.

This child was ordered a diet of animal food, in the form of beef-tea, well salted, with a piece of meat at dinner. Also a quinine mixture with sulphuric acid, which treatment was followed by immediate benefit. The spots over the body disappeared, the scrotum regained its natural colour and size, and on the 7th of September the only remains of the disease were a hard swelling, the size of a large nut, on the right spermatic cord, evidently a portion of the fibrine of the recently effused blood.

Case 4 was an infant seven months old, who was brought under my notice for obstinate diarrhœa, which had continued for a month in spite of all the treatment adopted by a most intelligent practitioner to check it. This treatment, I was informed, had consisted in the first instance of small doses of hyd. c. cretâ, with the simple chalk mixture, by which medicines the evacuations became more natural, but still the relaxation continued. After this astringents had been employed without avail, the bowels continuing to act seven or eight times daily.

When I first saw the patient she appeared somewhat emaciated, though not so much as usual in similar cases, nor was there great distress. The tongue was coated, and the motions had become again dark and offensive. I felt at first sanguine as to the issue of the case; but after three or four days, finding remedies useless, I suggested immediate change of air, the motions having become tinged with blood. The infant was at once removed to Blackheath, where a slight improvement seemed perceptible, when suddenly the evacuations became entirely blood, of a bright arterial tint. Collapse supervened, and at the same time the mother informed us there were some red spots about the body, which proved to be well-marked patches of purpura. The child died the next day.

This case is thus imperfectly mentioned, as it suggested to my mind that in many cases where infants and children perish from protracted diarrhœa, and after death very little mischief is revealed, by *post-mortem* examination, to account for the unmanageable nature of the disease, the fault is really in the sanguification. The circulating fluid, imperfectly assimilated, probably of too low a specific gravity, causes an inverse action in the intestinal tube, exosmosis being substituted for endosmosis, and thus a continuous flow of serous dejections, impossible to arrest, and a gradual emaciation of the patient. I believe these patients may be distinguished by their appearance. The skin is remarkably clear and transparent; the prolabia and buccal mucous membrane of a florid red; and, after a time, anasarca of the lower extremities takes place—almost always a fatal sign. After death, simple enlargement of the mesenteric glands, without tubercular deposit, with some enlargement of Peyer's glands, without ulceration, may be the only morbid appearances. I am, &c.,

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Addison, President, in the Chair.

CASE ILLUSTRATING THE DIFFICULTIES OF DIAGNOSIS OF MORBID GROWTHS FROM THE UPPER JAW.

WITH REMARKS.

By PRESCOTT HEWETT, Esq.,
Assistant-Surgeon to St. George's Hospital, &c.

The patient, a man aged 25, was admitted into St. George's Hospital, under the care of Mr. P. Hewett, in May, 1848, with a large tumour of an irregular shape, occupying various regions of the left side of the face. Presenting every appearance of having originated in the antrum, this tumour was found in the front and back part of the cheek, in the temporal fossa, in the orbit, and in the nostril, extending to the back part of the pharynx; round in shape, but lobulated; it was firm and elastic to the touch, perfectly moveable, and, in the nostril, of a dead white colour and glistening appearance. The skin, conjunctiva, and mucous membrane of the nose were quite healthy, and no enlarged glands could be detected in any part. The history of the case was, that six years previous to his admission into the hospital, the patient was troubled with a disease, supposed to be a polypus of the nose, which had been easily removed with the forceps; subsequently, however, the cheek began to swell, and the tumours gradually made their appearance in the regions in which they were found;—all this had occurred without any pain, and with very little inconvenience. A year ago caustic

had been extensively applied in two different places, large cicatrices marking the spots. This treatment had produced no effect on the disease, and no fungating growths followed the application. At different times, there had been extensive bleedings from the nose, which had somewhat reduced the patient. At a consultation of the surgeons of the hospital, it having been resolved that, in all probability, the disease was of the fibrous kind, and connected with the antrum, the removal of the upper jaw was decided upon, Dr. Snow, to whom the surgeons of St. George's are so much indebted for the able manner in which he for a long time administered chloroform at the hospital, having kindly undertaken to give it on this occasion. The patient being seated in a chair, the operation was performed in the usual manner; but, on removing the superior maxillary and malar bones, it was discovered that the disease was not connected with the upper jaw—it was altogether behind it. The larger portion of the tumour was dissected from off the pterygoid process, to which it was firmly attached. Those portions which were in the orbit and temporal fossa were removed without difficulty, being for the greater part simply connected with some very loose cellular tissue. The patient, having become faint, was placed in the horizontal posture, and a small quantity of stimulant administered, after which he soon rallied. The portion of diseased structure in the back of the nostril was then removed with a strong pair of curved scissars. The pulse having again failed, the patient was at once laid on a bed and carried into an adjoining room; different restorative means were made use of, and he appeared to rally somewhat; but shortly afterwards, as the breathing became embarrassed, an opening was at once made into the crico-thyroid membrane, and, as a last resource, an attempt was made to carry on artificial respiration with a tube, but every effort proved of no avail;—the patient soon died. But few vessels were met with during the operation, and no great amount of blood was lost. Little or no bleeding followed the incision in the neck. A careful examination of the bones removed during the operation showed that, in the superior maxillary, the antrum was all but obliterated, the posterior wall of the sinus having been forced, by the tumour lying behind it, against the anterior one; there was merely a chink left, the cavity of which was quite free, and lined by healthy mucous membrane. The malar was much more curved than natural. The structure of both bones was perfectly healthy. The tumours were of a purely fibrous character. At the dissection of the body, it was made out that the tumour had originated in the roof of the left nostril, its main point of attachment having been to the under part of the body of the sphenoid and inner surface of the pterygoid process. Portions of diseased structure were still found in the sphenoidal sinuses, as well as at the upper and back part of the septum nasi. Some loose bits were also found deep in the temporal fossa, and at the back of the orbit. These were lying in the cellular tissue. They were all connected to each other by slender pedicles, one of which passed through a hole in the perpendicular portion of the palate bone; that in the orbit had reached this situation by creeping through the spheno-maxillary fissure. The bones were throughout healthy in structure. The tissue of the growth was purely fibrous. The trachea and bronchial tubes, even to their minute ramifications, contained a quantity of frothy blood. The structure of the lungs was crepitant throughout, but each section presented numerous small dark spots of ecchymosis, produced by some of the air-cells having been also filled with blood; these organs were otherwise free from disease. The heart was healthy; its cavities contained small black clots, but the greater part of the blood was thin and fluid, and did not coagulate on exposure to air. The other viscera were quite healthy. In his remarks, Mr. Prescott Hewett principally drew the attention of the Society to the great difficulties which at times were found to exist as to a correct diagnosis of the precise region in which a tumour of the upper jaw had originated. Of these difficulties the present case afforded a good illustration. The history of the patient, and the various regions in which the tumour existed, had led to the conclusion that the disease, having sprung from the antrum, had gradually burst through some of the walls of this cavity, and thence spread to the spots where it was found. The operation, and the subsequent dissection proved, however, that the antrum had not been the starting point of the disease. Mr. P. Hewett had little or no doubt that the morbid growth had first begun in the nostril, and had subsequently reached the pterygo-maxillary fossa, either by making its way through the spheno-palatine foramen, or by breaking down a portion of the palate bone; once in the fossa, the progress of the tumour may easily be traced; it passed into the orbit through the spheno-maxillary fissure, and, in the face, it had in some parts made the bones yield, and in others it had so completely moulded itself to their shape, creeping over their cutaneous surfaces, that the outlines of the bones were scarcely discernible. Mr. P. Hewett's remarks were altogether confined to tumours of a fibrous character. The morbid appearances observed about the lungs led Mr. P. Hewett to ask the question whether the administration of chloroform was advisable in operations about the mouth where there was likely to be a certain amount of bleeding. He had no doubt that the blood found in the lungs had got there by passing through the glottis, and he doubted very much if such would have been the case had no chloroform been used. Many surgeons, fearing this accident, had of late not failed to condemn altogether the use of chloroform in these cases; but some, being unwilling to submit their patients to such serious operations without it, had adopted a middle course, administering this agent in the first steps of the operation only, hoping thus to avoid all risk. It remained still to be proved, however, whether, even with this precaution, there might not be danger in using anæsthetics in some operations about the mouth.

Mr. Fergusson said that the case was interesting in a variety of respects. It served to illustrate the difficulty of diagnosis in cases of this description. It was evident that the greatest care had been bestowed in investigating the nature of the case; every consideration had been given to it—as, indeed, no one could doubt on looking to the characters of the surgeons who had given their opinions about it; nevertheless, the disease proved to be somewhat different to what had been expected. It was supposed to have been a disease of the superior maxillary bone, but as far as he (Mr. Fergusson) could make out, the tumour was only connected with that bone by lying in apposition with it. From the description given of the disease, he should have supposed it to be a tumour of the antrum; and, indeed, had it not been for the very accurate description given by Mr. Hewett, of the compressed and altered condition of this cavity, which was observed lying in front of the tumour, he would have concluded that it must have originated in that part. There was one feature deserving of special notice, in a practical point of view. In the description that had been given of the case, he (Mr. Fergusson) had not noticed any allusion to the shape or form of the front part of the superior maxilla. All that was said was, that it seemed to be perfectly normal; that there was not any distortion of the alveolar ridge, the teeth, or the nostril. This would have led him to think the tumour deep-seated, as in most cases of tumour of the antrum it expands as much in front as at the back part. When there is not any alteration in shape or distortion in the front part of the superior maxillary bone, especially the alveolar ridge, the greatest caution should be used in deciding on an operation, because the tumour, in all probability, will be deep-seated, as in the present instance. He confessed that, in the absence of the particular changes in the alveolar process to which he had referred, and from the circumstance that the tumour had extended towards the orbit, and upwards and outwards, so as to involve the zygomatic ridge and fossa, he (Mr. Fergusson) should have felt some hesitation in resorting to an operation. What had occurred here served, perhaps, to show more conspicuously the difficulties connected with such cases. There were many other points connected with the pathology of this disease, which he would not then allude to, as they had been already, on former occasions, discussed in that room. With respect to the influence of chloroform, he (Mr. Fergusson) had operated very frequently since its introduction, in cases of this description, and some of these operations were very protracted. Chloroform or ether had been used in these cases, and its application repeated when its anæsthetic effect seemed to be wearing off. He had never met with any bad results, or anything which would lead him to believe that it might prove injurious. When chloroform was first introduced, he formed the opinion that it ought not to be used in these cases, because the blood trickling down the throat might perchance enter the larynx, and perhaps produce irremediable mischief. He had himself refused to operate in one case wherein it was proposed to give ether; but experience had since taught him that in these instances there was but little reason to dread mischief from that cause. He had even had cases in which the blood had trickled into the larynx, and yet no harm had resulted. He would wish to ask Mr. Hewett how long the operation had lasted, for a protracted operation of this kind might exhaust even a strong man. In such a case as this, all the circumstances should be carefully weighed, before the fatal result be attributed either to the operation or to chloroform.

Mr. Prescott Hewett said, in answer to Mr. Fergusson, that the separation of the bones occupied only eight or ten minutes, several of them having been much loosened by the tumour, by which means the operation had been greatly simplified. The entire amount of time the operation lasted,

it was difficult to state; but he thought about twenty minutes only. It was more protracted on account of the patient's fainting.

Dr. Webster remarked, that when the effects of chloroform were fatal, the blood was fluid and black, and there was air found in the heart and veins. He would wish to ask Mr. Hewett if it had been so in his case.

Mr. P. Hewett said, the blood was fluid and of a dark colour, but not black. He had not noticed air in the heart. If death in this instance was induced by the chloroform, it was by suffocation from blood in the larynx, and not in the way in which that agent usually destroys life.

Dr. Snow contended that the blood in Mr. Hewett's patient did not enter the air-passages during the operation, as there was not any dyspnœa; he thought it probable that it occurred during the syncope, or while *in articulo mortis*. His experiments on animals had shown that the glottis was not paralysed by chloroform; and his experience in similar operations on the jaw-bones, and in other operations about the mouth, proved that there was not any real danger from that cause. The nerves of sensation are affected by chloroform, as in asphyxia. In drowning persons water does not enter the air-passages so soon as unconsciousness occurs, although a little may pass in when *in articulo*. In animals destroyed by chloroform, the blood is more or less coagulated. Its fluid condition in men deceased under its influence he attributed to the attempts at artificial respiration, &c. The author had said, that surgeons were in general opposed to the use of chloroform in this operation, but Mr. Fergusson, and others he could name, would show that that was not quite correct.

Mr. Johnson referred to the various causes assigned for the death in this case. The operation, although protracted through the patient's fainting, and the difficulty experienced in removing the back part of the tumour, was not of so long a duration as many such are. The opening of the trachea was not practised till the patient was dying or dead; nor had he seen or heard of the blood passing into the larynx during these operations. From what he saw on that occasion, he would be chary of using chloroform in operations about the face and mouth.

Mr. Barlow quite agreed with Mr. Hewett in his explanation of the cause of death, for the diminished irritability of the glottis would permit the entrance of the blood into the lungs, and they would be unable to expel it, by reason of the peculiar action of the chloroform. This agent has been proved by experiment to possess the power of lessening muscular irritability.

Dr. Marshall Hall considered that Mr. Hewett's case showed the effects of this agent on the larynx and heart. Chloroform was a most fearful poison. Its influence is first exerted on voluntary motion, next on the respiratory organs, and lastly the circulation fails. Fatal cases have been rare in hospitals, on account of the skill of the exhibitor; but in private practice it is different, because the operator may not be skilled in its use. He thought the patient died from the effects of arrested respiration and circulation, and from asphyxia. Dr. Snow's experiments were illusory, for, in drowning, the act of respiration is expiratory, not respiratory,—more likely for fluids to be expelled, instead of inhaled. He had not often seen its effects on men, but on animals only. He thought it a great question whether chloroform should be used at all. It was a bad change from ether to chloroform; the former was the less dangerous. Dr. Hall then spoke of the amputation practised some years ago under the alleged influence of mesmerism. This had since been proved to have been a sheer fraud. (a)

Dr. Copland, in reference to the shock on the system, inquired if it were not greater, when anæsthesia had been produced. He believed it was, and that the patients lost the benefit of the subsequent reaction. With respect to the blood in the air-passages; in death from chloroform, the lungs were congested, and the blood fluid. Under those circumstances the blood, he thought, might be furnished by exudation through the bronchial membrane.

Mr. Tracy remarked, that, according to Dr. Snow, the patient lived an hour after the occurrence of syncope. He had never known such circumstances attend death from chloroform; but in this instance, perhaps, it was caused by the combined effects of the shock and chloroform. He had never seen a case where it had been used prior to operations on the mouth, and had been followed by blood passing into the lungs, although he had employed it somewhat largely.

Dr. Addison said, cessation of the bleeding was the first bad symptom in the fatal case which he had seen. He would wish to know from Dr. Snow what led him to conclude that chloroform was not the cause of death in this case.

Dr. Snow referred to the minor degree of insensibility, and the absence of stertor or of relaxation of the muscles. The operation was one attended with danger, the patient blanched and exhausted by great losses of blood, the tumour extending further back than was supposed, and not entirely removed, the part remaining oozing blood. The shock, prevented for the time by chloroform, may be felt when the influence of the drug ceases. From all these facts, he concluded that the operation was a very serious one, but not necessarily fatal. He could not, therefore, admit that the anæsthetic agent was the cause of death.

Dr. Webster considered that chloroform had something to do with the death. The blood was dark and fluid, as it happens in such cases; but he should wish to have his question answered, as to the presence of air in the heart and veins.

Mr. Hewett in reply said, there was not any air in the heart, but he could not say about the veins, as they had not been examined.

Mr. C. Hawkins observed that Mr. Hewett did not consider that death was caused by the ordinary application of chloroform, but from some accident during its exhibition. The operation was rapidly done, and with but little loss of blood. He had never seen a person die as this man did; he seemed to die as if air had entered his veins. Dr. Copland's remark, that the shock would be greater during the insensibility, astonished him. If it were so, it would be a great objection to its use.

Mr. Cæsar Hawkins was convinced that death was caused by the blood entering the lungs, and that that would not have occurred if chloroform had not been given. It was, however, a very simple accident, and should not militate against the further use of the drug. Chloroform is doubtless very poisonous, and should not therefore be used for trifling operations. He would ask Mr. Solly whether it was not given in the Borough hospitals by the house-surgeon and dressers. The only cases in London hospitals where death had occurred, were two at Guy's and one at St. Thomas'.

Mr. Solly had published his fatal case in all the medical journals. A dresser watched the circulation; exclaimed it was failing, and the next moment the man was a corpse. At St. Thomas', there was no one appointed to give chloroform, but its effects were always carefully watched. In his case, the cause of death was palsy of the heart, and he thought the same cause operated in Mr. Hewett's case, aided by the repeated hæmorrhages. He would not employ chloroform in operations about the mouth. Was Mr. Hewett's patient sitting or lying down?

Mr. Hewett said, sitting.

Mr. B. Phillips remarked, that before ether or chloroform were employed in surgical operations, patients had died suddenly while undergoing an operation. Such cases will always occur from time to time.

The next meeting will be on the 14th January, 1851.

(a) Dr. Hall speaks in so low a tone that it is exceedingly difficult to catch his meaning. He consequently renders the task of the reporter, as far as regards the publishing his observations, more annoying and troublesome than even the want of proper accommodation for the press.—Rep.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. Latham in the Chair.

Mr. Henry Charles Johnson exhibited the preparation of a bladder removed from a man, aged 72, who had undergone the operation of lithotrity more than once, and with which was connected a large sac at its upper part, filled with small calculi.

About three years previous to his death, having suffered many years from symptoms of stone in the bladder, he underwent the operation of lithotrity in St. George's Hospital, and left the hospital apparently well. Prior to the operation, the urethra was gradually dilated till it would allow of the passage of a bougie, size No. 20. About two years after he quitted the hospital the former symptoms of stone returned and became troublesome,—the urine alkaline and filled with ropy mucus, and being passed constantly; the health much shattered, and the pain preventing sleep at

night. He was again admitted into the hospital, and under treatment somewhat improved, so that the operation of lithotrity was again performed, and several small calculi were broken up. For a fortnight after the operation everything went on well, and numerous fragments and sand were daily passed. A month after the operation, he suffered more pain in passing the fragments, and the urine was more ammoniacal and ropy. His tongue became dry; and he gradually sank, and died about six weeks after the last operation.

Examination.—The kidneys were imbedded in much fat, their surfaces dark and dotted with points of lymph and pus; the right one being in the most advanced stage of inflammation with more evidence of pus mixed with the lymph: in its substance was a small abscess filled with pus. The mucous membrane of both pelves was almost black, and covered with bloody secretion. The ureters were dilated, and their lining membrane in the same condition of congestion and inflammation. The bladder was filled with bloody urine and much corrugated internally, and the muscular coats hypertrophied; the mucous membrane inflamed; above and to the right of the bladder was a small pouch which communicated with its cavity by a contracted opening, and which was filled with calculi of a triangular shape and soft consistence, formed chiefly of the phosphates. The bladder itself contained some fragments of calculi. The prostate gland was much enlarged; some fragments of calculi were found impacted in the membranous portion of the urethra. There was no suppuration external to the urethra. In this specimen Mr. Johnson called the attention of the Society to the circumstance of the impacted portion of stone in the urethra—an accident of frequent occurrence, and which generally required an incision in the perineum for its relief, but in this instance would have been of no avail, as the patient died from abscess in the kidneys, and did not present the ordinary symptoms of impaction in the urethra.

Mr. Pollock exhibited some specimens showing portions of calculi impacted in the urethra after the operation of lithotrity. One specimen was from a man aged 62, admitted into St. George's Hospital, under Mr. Cæsar Hawkins. He had suffered from symptoms of stone in the bladder for two years; his water was occasionally tinged with blood, and the irritability of the bladder considerable at times. He appeared in good health. The stone was readily detected, and was apparently of considerable size. It was crushed by Mr. Cæsar Hawkins without any difficulty, and without much pain, and before the instrument was withdrawn the fragments were broken down some ten or twelve times. The stone was a very hard one. One fragment was fixed into the eye of the instrument, and gave pain in its passage through the urethra, meeting with some difficulty in its withdrawal at the orifice. He passed several fragments during the few succeeding days. On the evening of the operation he was attacked with severe rigor, followed by profuse sweating. Three days after the operation he was again attacked by severe rigor and profuse sweating. The catheter was used daily. The urine was alkaline, fetid, contained much mucus and sand, and was tinged with blood. The bladder was washed out with warm water daily, and many fragments of stone brought away by this means. A succession of severe rigors and profuse perspirations returned daily till the sixth day, when the irritative fever was considerable. On the seventh day he was better. Subsequently the urine was again dark, alkaline, and passed with much straining. The quantity of blood in the water increased. He died on the twelfth day after the operation.

Examination.—Thorax.—Evidence of slight recent pleurisy on left side. The surface of lung dotted with spots of congestion, in many of which were small specks of lymph or pus. The spots of congestion existed generally throughout the structure of the lung. The right lung was gorged with serum, and much congested and softened posteriorly. The heart flabby; the blood chiefly fluid.

Abdomen.—The kidneys were flabby in texture, and contained a number of small cysts throughout their entire substance, and in both patches of congestion, in the centre of which were specks of lymph and pus. The bladder much contracted and thickened, its lining membrane thrown into irregular folds, which were slightly coated with phosphate of lime. The mucous membrane greatly inflamed, and that lining the membranous portion of the urethra sloughy and shredded; small ulcerated openings passed a little way into the surrounding cellular tissue. The bladder contained numerous fragments of calculi, one very large, about the size of the original stone. There were also several small pieces in the membranous portion of the urethra. The prostatic veins were inflamed and blocked up with coagula. The prostate was much enlarged.

The second specimen was from a man aged 33, admitted under Mr. Cutler, with all the symptoms of stone in the bladder, and for which he underwent the operation. At the first operation it was broken several times, nor did any disturbance follow. The fragments were again broken down twelve days after the first operation. This time a slight rigor followed the withdrawal of the instrument, and soon afterwards a piece of stone became lodged in the urethra in front of the scrotum, which was cut down upon and removed. A fortnight after the second operation the fragments were again crushed, and several portions were extracted at the time, and much followed through the catheter. Considerable irritative fever followed, with rigors and profuse perspirations, and he died about three weeks after the last operation.

Examination.—Left pleura filled with yellow serum, mixed with much lymph; lung much congested, and contained several foul abscesses; recent pleurisy on right side; right lung inflamed and contained several abscesses; blood generally fluid.

Abdomen.—Liver natural; kidneys rather large; veins surrounding bladder, prostate, and rectum congested, and many of them filled with pus; a foul abscess in the perineum, communicating with the urethra at the membranous portion, through several openings; the bladder contracted; the mucous lining dark-coloured; some fragments of calculi in the bladder. The membranous portion of the urethra was ulcerated, and communicated with the abscess in the perineum. About 3½ inches beyond this ulceration, another lacerated opening existed in the urethra at its lower part, which communicated externally. This had been made during life to extract the fragment of stone.

Mr. Pollock alluded to a third case, in many respects similar to the two preceding ones, in which a man underwent the operation of lithotrity two or three times, and subsequently died, having suffered from great irritation and constitutional disturbance following the last operation. On examination a large portion of stone was found fixed in the membranous portion of the urethra, having partly worked its way out through the floor of the urethra, where a large opening existed communicating with a foul abscess external to the urethra. The cases presented to the Society were specimens of one of the accidents attendant upon the operation of lithotrity, and deserved attention as specimens of an accident which fortunately did but rarely prove fatal. If the specimens were evidence of any one point in common, they were evidence of the tendency that occurred after this operation, for fragments of calculi to become lodged in the urethra after the crushing of the stone in the bladder. The case exhibited by Mr. Henry Charles Johnson was evidence of this fact, but in this case the occurrence was not attended by unfavourable symptoms, nor did it apparently add to any of the causes of death. The urethra in this case had been most amply dilated, and had not been apparently lacerated by endeavouring to withdraw the lithotrite loaded with fragments of calculi.

In the other specimens exhibited, the fragments had most probably lodged in some lacerations of the urethra, and had then set up the mischief which was found after death. In this operation every precaution should be taken to avoid injuring the urethra, when the lithotrite is withdrawn from the bladder. With every precaution, however, this accident cannot always be avoided, as when a piece of stone is fixed in the eye of the instrument, and cannot be removed until the instrument is withdrawn.

The stoppage of a fragment of stone is not an uncommon event after the operation of lithotrity; but the danger occurs, first, from the stoppage taking place in consequence of a laceration of the urethra; and, secondly, when the stone, not being detected, remains in the urethra. When the stoppage of a portion of stone is detected, it may be either taken away or pushed back into the bladder, or else removed by an incision. The removal of the impacted portions by incision in either of the cases related by Mr. Pollock would have availed nothing; the operation was proposed, but not performed, as the patients were evidently dying from the effects of absorption of pus.

Mr. Charles Hawkins begged to make a few observations

on the very interesting preparations before the Society; he was anxious to do so, because they illustrated a very important point of practice with regard to the operation of lithotrity. He considered them as the result of *the accidents* of the operation, but not as a common result. It had fallen to his lot to see the operation of lithotrity performed in private practice several hundred times, and, in the course of his experience, he had only seen this accident occur four times; in two the fatal result (as shown by the preparations now before the Society) had been averted by timely cutting down on and removing the impacted stone, and, by thus making an external opening into the urethra, avoiding all the unfortunate results of a piece of stone lodging in a lacerated portion of that canal, such as infiltration of urine and abscess,—certain results of such an accident, if no external opening be made, and the piece of stone remains in the urethra. But he believed this accident might be entirely avoided if the operation of crushing be performed with the lithotrite; that is, if the operator is satisfied with crushing the stone, and not attempting to withdraw the fragments between the beaks of the instrument. He believed this accident never occurred, except where the urethra had been lacerated with a piece of stone during the withdrawal of the instrument; then impaction of a fragment led to the results which the preparations exhibited; but, where the urethra has not been lacerated, impaction is of little importance, and no dangerous symptoms are likely to result from such an occurrence. At least this was the result of his experience. Since no attempts had been made to remove fragments from the bladder in the instrument, he had met with no such accident. Impaction when the urethra is not lacerated does occasionally occur, but with care all danger may be avoided. He had removed as much as half a wine-glassful of detritus, by means of a small silver scoop, without any difficulty, in a late case under his care: he had been obliged to remove a large portion of the stone by this means; indeed, so easy was it that this patient used the instrument himself in the same manner. He believed that the result, as shown by the preparations, was merely the result of the urethra having been lacerated, and stones becoming impacted in such rents, and not that the laceration of the urethra was caused by the stone becoming impacted. He had never seen any danger arise from impaction where there had been no bleeding from the urethra following the operation. As far as his experience went, it was not necessary to attempt the removal of stone in the scoop lithotrite. If the stone *is well crushed*, it may be left to nature for the bladder to be evacuated of the fragments; or, where there is a difficulty in passing them, he had removed much by means of washing out the bladder. This accident had never occurred in his own hands. Abscess will form in the neighbourhood of the bladder after lithotrity, when there has been no *impaction*, nor laceration, nor the least injury to the bladder or urethra.

Mr. Pollock had assisted him to make a *post-mortem* examination of a most interesting case of this nature, where a large abscess had formed between the bladder and rectum, where there was not the *slightest* injury to the urinary apparatus, where all the stone had been removed, and where the patient was convalescent, but where the cause of death appeared to have depended on that state of heart so well described by Dr. Quain, the patient dying instantaneously on making some sudden exertion just after his dinner.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, December 28.—Medical Society of London. *Subject*:—Dr. Glover, on Picrotoxine, Illustrated by Experiments. Eight o'Clock.

Thursday, January 2, 1851.—South London Medical Society. Half-past Seven o'Clock.

——— ——— Harveian Society. Eight o'Clock.

Friday, January 3.—Botanical Society of London. Eight o'Clock.

——— ——— Western Medical and Surgical Society. Eight o'Clock.

Saturday, January 4.—Medical Society of London. *Subject*:—Mr. Hancock on Hernia. Eight o'Clock.

MEDICAL NEWS.

Royal College of Physicians.—At the quarterly meeting of the Comitia Majora, held on Monday, Dec. 23, the following gentlemen, having undergone the necessary examinations for diploma, were admitted Members of the College:—

Ancram, Dr. Rutherford, Valparaiso.
Roberts, Dr., Brook-street.

The following gentlemen were admitted extra licentiates:—

Alexander, Dr., North Audley-street,
Brett, Dr., Southampton-street, Mornington-crescent,
Sullivan, Dr., Chili.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 20th inst.:—

Backhouse, James, Brindloss, Manchester.
Brown, Thomas John Eames, Dorchester, Dorset.
Carson, Alexander, Colerain, County of Derry.
Gibson, John, Hackney.
Hudson, Frederick, Stockport, Cheshire.
Jones, Nathaniel Walton, Chichester, Sussex.
Jones, Thomas John, Almwch Anglesea.
Meane, John, Brighton, Sussex.
Roberts, Robert, Dyffryn, Ardudwy, Merionethshire.
Sproule, Robert, Brockagh, county of Donegal.
Wall, Robert, Cork.

At the same meeting of the Court, Mr. Julian Woollgar Slight passed his examination for naval surgeon. This gentleman had previously been admitted a member of this College, his diploma bearing date June 27, 1845.

The Royal College of Surgeons have appointed Mr. Samuel Highley, of Fleet-street, medical bookseller to that Institution.

University College.—We regret to find that Professor Graham is in very bad health. Professor Sharpey, we rejoice to hear, is to remain one of the brightest ornaments of this Institution. Report says, that Dr. Bennett, of Edinburgh, was a refractory subject; he would not vacate his chair, or accept translation to one of clinical medicine, to make room for the celebrated London physiologist.

Death from Dissecting.—Mr. Williams, of the Middlesex Hospital, we regret to learn died from this cause on the 21st inst. He was taken into the hospital, where he received the kindest and most unremitting attention.

St. Mary's Hospital.—There were *three hundred* candidates for the Secretaryship of this new Institution. The salary is 200*l.* a-year, and the gentleman selected is a member of the English bar.

Bloomsbury Dispensary.—The following gentlemen are candidates for the appointment of Physician to this Dispensary, to which is attached, as also to the surgency, a salary of 100*l.* a-year:—Dr. Goodfellow, Dr Johnson, Dr. Steggall, and Dr. Pidduck.

Marylebone Dispensary.—The Governors of this Institution, we are happy to learn, propose to resume the payment of their medical officers. That the medical officers of all charities are not paid is, we fear, their own faults.

Hagyard *v.* Coates.—On the 19th inst., in the County Court, Bridlington, Mr. Hagyard, surgeon, of Hunmanby, brought an action against J. Coates for 15s., for attendance in midwifery upon his wife. The defendant pleaded his inability to pay this amount. His Honour, Judge Raines, inquired the usual amount paid by the Board of Guardians in cases of midwifery; and was informed that 10s. 6d. constituted the sum paid for confinements, without regard to distance, which induced His Honour to give a verdict of 10s. 6d. for the plaintiff. Although the plaintiff, a most respectable man, swore that Coates was able to pay the amount at once, the Judge directed him to pay 2s. a month; thus the Profession will perceive that County Court law professes to regulate the charges of medical men by the "*penny wise*" folly of the Board of Guardians; and crowns the insult by the miserable and unnecessarily tedious manner in which the payments are made. It is high time that some Legislative measure was enacted to restrain the oppression which is daily victimising the honest practitioner from east, west, north, and south.

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